Identified Wildlife Management Strategy

Procedures for Managing Identified Wildlife

Version 2004

BRITISH COLUMBIA

Ministry of Water, Land and Air Protection

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Preface

The Identified Wildlife Management Strategy is an initiative of the Ministry of Water, Land and Air Protection in partnership with the Ministry of Forests and carried out in consultation with other resource ministries, stakeholders and the public. Statutory authority is provided for the Ministry of Water, Land and Air Protection to carry out this strategy under provisions of the *Forest Practices Code of British Columbia Act* and regulations and under the new *Forest and Range Practices Act* and regulations.

Two companion documents address the management of Identified Wildlife, and together comprise the Identified Wildlife Management Strategy. The first document, *Procedures for Managing Identified Wildlife*, describes the procedures for establishing, modifying and rescinding a wildlife habitat area, and for implementing strategic- and landscape-level planning recommendations. This document provides direction to government planners, foresters and wildlife managers.

The second document, *Accounts and Measures for Managing Identified Wildlife*, summarizes the status, life history, distribution and habitats of Identified Wildlife, and outlines specific guidelines for management of their habitats.

These documents are a resource for government planners, foresters and wildlife managers, and for those persons interested in the life histories of Identified Wildlife.

Contents

Preface iii
Table Of Contents iv
Introduction 1
Selection of Identified Wildlife 1
- Species at Risk 2
- Regionally Important Wildlife 2

Management of Identified Wildlife 2
- Coarse Filter Management 2
- Fine Filter Management 2

Procedures For Establishing WHAs And GWMs for Identified Wildlife 4
- Step 1. Site is Proposed 4
- Step 2. MWLAP Technical Review of Proposed WHAs 5
- Step 3. Review And Comment of Candidate WHA 6
- Step 4. Preparation of Final WHA Package 9
- Step 5. Review by the Provincial WHA Committee 9
- Step 6. Decision (MWLAP Delegated Decision Maker) 9
- Step 7. Notice of Decision, Impact Tracking, and Warehousing of Approved WHA Boundaries 9

Internet Access To Information about the IWMS 10
Tracking the Status of WHAs 11
Modifying a WHA or GWM 11
- Modifying a WHA Boundary or Rescinding a WHA 11
- Modifying a GWM During Review and Comment 11
- GWM Compliance and Exemption under the FRPA 11
- Approving Variances to Legal GWMs 12

Interim Protection for Candidate WHAs 12
Procedures for Updating the List of Identified Wildlife 12
- Regular Updates 12
- Emergency Listings 13
- Notification of Updates 13

Planning Thresholds 13
- Measuring and Tracking Timber Supply Impacts 13
- Measuring and Tracking Range Impacts 17
- Implementing the IWMS Consistent with Higher-level Plans and Sustainable Resource Management Plans 17

Energy and Mineral Resources 17
Energy and Mineral Activities 17
Ministry of Energy and Mines and Oil and Gas Commission Involvement 18
Policy on Sensitive Information about Species at Risk 18

Appendix 1. Summary of Procedures for Establishing WHAs and GWMs 20
Appendix 2. WHA Data Forms 21
Appendix 3. Obtaining Surface and Subsurface Tenure Holder Information 31
Appendix 4. First Nations Review and Comment Procedures 35
Appendix 5. Affected Party Review and Comment Procedures 37
Appendix 6. WHA Summary Form 40
Appendix 7. Provincial WHA Committee 42
Appendix 8. WHA Mapping Protocol 43
Appendix 9. Requirements for Complying with a GWM and Exemption Provisions Provided under FRPA 52

Introduction

British Columbia has a rich diversity of native wildlife and habitats. The conservation of biological diversity continues to be a goal under the new *Forest and Range Practices Act* (FRPA). It is intended that the FRPA in combination with the network of protected areas will maintain ecosystem process and habitat for the majority of wildlife, including plant communities. Some wildlife require additional or specific management. The Identified Wildlife Management Strategy (IWMS) is the mechanism for addressing the habitat requirements of these wildlife.

Under the FRPA, the Minister of Water, Land and Air Protection (MWLAP) is authorized to establish two categories of wildlife as requiring special management attention to address the impacts of forest and range activities on Crown land. These two categories of wildlife are Species at Risk and Regionally Important Wildlife. The Species at Risk category includes endangered, threatened, or vulnerable species of vertebrates and invertebrates, and endangered or threatened plants and plant communities that are negatively affected by forest or range management on Crown land and are not adequately protected by other mechanisms. The Regionally Important Wildlife category includes species that are considered important to a region of British Columbia, rely on habitats that are not otherwise protected under the FRPA, and may be adversely impacted by forest or range practices. Together these two categories of wildlife—Species at Risk and Regionally Important Wildlife—are referred to as Identified Wildlife under the IWMS.

The IWMS provides direction, policy, procedures and guidelines for managing Identified Wildlife. The goals of the Strategy are to minimize the effects of forest and range practices on Identified Wildlife situated on Crown land and to maintain their limiting habitats throughout their current ranges and, where appropriate, their historic ranges. In some cases, this will entail restoration of previously occupied habitats, particularly for those species most at risk.

The IWMS applies to all Crown land regulated by the FRPA, as well as to private land that is subject to a tree farm or woodlot license. The IWMS addresses only forest and range practices regulated by the FRPA. It does not address activities such as hunting or poaching. Under the *Wildlife Act*, native terrestrial vertebrates designated as "wildlife" are protected from killing, capture and harassment except by permit or regulation. The strategy also does not address agriculture or urban development. British Columbia's Protected Areas Strategy preserves important habitats through a network of parks and ecological reserves, but many unique habitats occur outside this network.

The IWMS is intended to be one tool that can be used in species recovery planning or larger conservation efforts. A role of the MWLAP is to work in concert with stakeholders and partners to develop conservation strategies and recovery plans for Species at Risk. These plans and strategies address all requirements for a species' conservation, including research and inventory needs, habitat conservation, and regulatory changes.

The management practices presented within the IWMS Version 2004 are designed to reduce the impacts of forest and range management on Identified Wildlife within targeted social and economic constraints. The Strategy represents an attempt to balance both socio-economic considerations and the conservation of species at risk in managed forests and rangelands. It is believed that this strategy marks a continued commitment to responsible stewardship of Identified Wildlife.

Selection of Identified Wildlife

Identified Wildlife comprises two categories of wildlife as defined under the *Forest and Range Practices Act:* Species at Risk and Regionally Important Wildlife. The following sections outline the selection criteria for each of these categories.

Species at Risk

On May 3, 2004 the Minister of Water, Land and Air Protection approved 39 species,, subspecies and populations for inclusion in the category of species at risk. This category of species at risk represents those species that may be affected by forest and range management on Crown land and are listed by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), current to November 2002. The species included in this list represent the Identified Wildlife that will form the basis of the Identified Wildlife Management Strategy Version 2004.

An additional list of non-COSEWIC listed provincially red- and blue-listed species have been identified as being negatively affected by forest and range management on Crown land. It is anticipated that these species will be evaluated for inclusion in the category of species at risk and IWMS Version 2004 in the near future.

Species Listed by the Committee on the Status of Endangered Wildlife in Canada

The federal *Species at Risk Act* received royal assent in December 2002. Under the *Species at Risk Act*, the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) was legally constituted and will continue to assess and classify wildlife species following the framework of the *Species at Risk Act*. COSEWIC determines the national status of wild Canadian species, subspecies and separate populations suspected of being at risk. The IWMS Version 2004 includes all COSEWIC-listed species found in British Columbia that are negatively affected by forest and range practices on Crown land and that require protection in addition to that provided by other mechanisms, current to November 2002. The list of Identified Wildlife will be updated annually and will reflect changes in COSEWIC and *Species at Risk Act* listings. To ensure that "emergency" situations can be addressed within the IWMS, a species can be added to the Identified Wildlife list at any time, based on a recommendation of the Director of the Biodiversity Branch. For more details, see *Procedures for Updating the List of Identified Wildlife* below.

Regionally Important Wildlife

Regionally Important Wildlife have not been included in the IWMS Version 2004 at this time. MWLAP staff are currently evaluating and determining which species should be recommended as Regionally Important Wildlife for inclusion in the IWMS at a future date. Fine-filter mechanisms to manage Regionally Important Wildlife are not yet available (see *Management of Identified Wildlife* below). In the interim, Regionally Important Wildlife may be managed through wildlife habitat features, wildlife tree retention areas, old growth management areas, riparian areas and other coarse-filter provisions.

Management Of Identified Wildlife

Coarse Filter Management

Coarse-filter conservation management is intended to maintain biodiversity on a broad scale by managing multiple habitats and species. Coarse-filter provisions include protected areas, parks, provisions for managing seral stages such as old forest, provisions for wildlife tree retention, management of riparian areas, as well as strategic- and landscape-level planning. Some of the habitat requirements for some Identified Wildlife should be addressed through coarse-filter provisions.

Fine Filter Management

The IWMS provides a fine-filter tool or mechanism for managing and conserving specific species and plant communities, particularly those that require special management that cannot be achieved through other coarse-filter provisions in the FRPA. It complements coarse-filter mechanisms that manage multiple habitats and species.

Under the FRPA and regulations, Identified Wildlife (Species at Risk and Regionally Important

Wildlife) can be managed through the establishment of wildlife habitat areas (WHA), general wildlife measures (GWM) within WHAs or other spatially defined areas, objectives for WHAs, wildlife habitat features (WHF), and other management practices specified in strategic- and landscape-level plans. For the most part, WHAs, GWMs, WHA objectives, and WHFs are stand-level measures that cannot address the issues of habitat supply, habitat connectivity and population viability. Such considerations should be taken into account during strategic- and landscape-level planning.

Where forest tenure holders continue to function under a Forest Development Plan during transition to the FRPA, WHAs, GWMs and other management practices specified in strategic- and landscape-level plans will continue as tools for the management of Identified Wildlife.

The IWMS represents an attempt to balance both socio-economic considerations and the conservation of species in managed forests and rangelands. Current government policy has set a limit of 1% to the allowable impact to short-term harvest levels that may be incurred as a result of implementing measures for Identified Wildlife (for more information, see *Planning Thresholds* below).

Wildlife Habitat Areas

Wildlife habitat areas (WHAs) are mapped areas that are necessary to meet the habitat requirements of an Identified Wildlife element. WHAs designate critical habitats in which activities are managed to limit their impact on the Identified Wildlife element for which the area was established. The purpose of WHAs is to conserve those habitats considered most limiting to a given Identified Wildlife element.

Wildlife Habitat Area Objectives

The ability to establish objectives for a WHA is a new tool available under the FRPA and is consistent with the shift toward more results-based forest practices. Forest tenure holders will be required to prepare results and strategies for their forest stewardship plans that are consistent with these objectives. These results and strategies will be enforceable. Detailed procedures and steps required for establishing WHA objectives are currently under development and will be appended to this document once completed. Current procedures address only the establishment of WHAs and associated GWMs. Forest tenure holders who wish to proceed with WHA objectives for an operating area in the interim should contact the WMLAP regional designate.

General Wildlife Measures

General wildlife measures (GWMs) describe management practices that must be implemented within WHAs or other spatially defined areas. These measures may entirely prohibit or partially limit activities during sensitive periods, such as the breeding season. Activities that may be affected include road construction and maintenance, grazing, hay cutting, and timber harvesting. Within a WHA, GWMs describe the management practices that must be implemented and prescribe a level of management appropriate to the conservation status of the Identified Wildlife element. Operational practices must comply with established GWMs. However, affected parties may apply for an exemption to a GWM (see *GWM Compliance and Exemption Under the FRPA* below). The current procedures address only the establishment of GWMs associated with a WHA.

Wildlife Habitat Features

Wildlife habitat features (WHF) are specific features of wildlife habitat that require special management under the FRPA. Under the FRPA regulation, a WHF must not be damaged or rendered ineffective by activities such as timber harvesting, silviculture treatments, road construction, road maintenance or road deactivation. It is intended that WHFs associated with all Identified Wildlife will be protected under this designation. Protection allotted to WHFs under the FRPA will serve as the basis for interim protection of candidate WHAs during the establishment process (for more detail, see *Interim Protection for Candidate WHAs* below).

Sustainable Resource Management and Planning Recommendations

The Ministry of Sustainable Resource Management leads both strategic- and landscape-level planning. MWLAP plays a supporting role and provides technical information when required.

Strategic-Level Planning

Some Identified Wildlife range over a large geographical area, occur at low densities, have widely but sparsely distributed habitats, and/or are sensitive to forest-level disturbances. WHAs and GWMs may prove to be insufficient to conserve viable populations of some species throughout their range in British Columbia. To effectively manage these species, their requirements must be addressed over large areas, such as regions or watersheds.

The *Accounts and Measures for Managing Identified Wildlife* document contains recommendations for strategic-level planning for a number of Identified Wildlife elements. These are just recommendations and should not be viewed as mandatory. They are intended to serve as recommendations to public or interagency planning committees or to guide management considerations in the absence of strategic planning processes. It is anticipated that most Identified Wildlife elements can be managed under the 1% timber supply impact allocation and the coarse-filter provisions under the FRPA. However, management of some species (formerly known as "higher-level plan" species) may require additional impacts that exceed the 1% allocation and coarse-filter provisions. These species may include Mountain Caribou, Grizzly Bear, Spotted Owl, and Marbled Murrelet. If objectives for Identified Wildlife exceed current policy impact limits, additional impacts will require a land-use decision.

Landscape-Level Planning

Landscape-level planning is primarily a coarse-filter tool for managing biodiversity. However, if landscape-level planning incorporates species-specific objectives, the management approach becomes fine filter in nature.

The critical habitat requirements for some Identified Wildlife can be addressed through establishing old growth management areas, wildlife tree retention areas and through riparian management. It may be possible to effectively plan for a greater number of species and to accommodate their connectivity requirements while reducing incremental economic impacts if the requirements of Identified Wildlife and placement of WHAs are considered during landscape-level planning. Where landscape-level objectives for Identified Wildlife are developed, they should be guided by the appropriate Identified Wildlife element account.

Procedures for Establishing WHAs and GWMs for Identified Wildlife

The following steps are required for establishing WHAs and their associated GWMs under current policy limits for timber supply impacts. If there is an existing higher-level plan or sustainable resource management plan, the implementation of the IWMS must be consistent with existing objectives and targets. For more details, please see *Implementing the IWMS Consistent with Higher Level Plans and Sustainable Resource Management Plans* below. See Appendix 1 for a summary of the steps required to establish a WHA.

The procedures that follow are not intended to address the steps required to establish WHA objectives. Procedures are currently under development to address WHA objectives and will be appended to this manual upon completion.

Step 1. Site is Proposed

WHA proposals may be submitted by a variety of sources including, but not limited to, forest tenure holders, government agencies, species at risk recovery teams, public or private individuals and/or institutions. Affected parties, including government agencies, should be involved at the earliest

point possible in the WHA proposal process, for example, involvement in WHA site selection and boundary delineation where appropriate.

Proposals may be for a single WHA or several WHAs for the same Identified Wildlife element. For multiple WHAs, the largest extent for a single proposal should be a tree farm license. Proposals must be submitted to the MWLAP regional designate within the responsible regional office. The respective regional designate will be the primary contact for proposed, candidate and approved WHAs.

When drafting WHA boundaries, every effort should be made to incorporate suitable habitat while minimizing reductions in timber supply and impact on other resources (range, petroleum and mining, see Appendix 8).

All WHA proposals must include the appropriate WHA data form and a map of the WHA.

WHA Data Form

There are two WHA data forms: one for single WHAs and one for multiple WHAs (see Appendix 2 for sample forms). The proponent must complete Step 1 of the appropriate WHA data form. Provide a thorough description of the site(s) and describe, in detail, how the site(s) meets the eligibility requirements as specified in the element account. Where appropriate, provide information about the WHF(s) contained within the WHA. For multiple WHA submissions, if different WHA polygons meet the eligibility requirements differently, indicate that on the data form.

Map of the WHA Polygon(s)

Each WHA submission must also include a detailed map(s) that accurately depicts the size and shape of the proposed WHA polygon(s). Where possible, reconcile the WHA polygon(s) against TRIM topographic data (e.g., roads, water features and contours). Submit this information in digital format, ArcInfo coverage or shapefile, if possible. See Appendix 8 for detailed WHA mapping and submission requirements. For each element, the WHA size requirements are described in the *Accounts and Measures for Managing Identified Wildlife* document.

Step 2. MWLAP Technical Review of Proposed WHAs

In Step 2, the proposed map and documentation are reviewed, amended, and accepted or rejected by the MWLAP regional designate.

Each proposed WHA must be assigned a WHA Tag. The WHA_TAG is a five-character unique identifier using the format 6-001: the MWLAP region number followed by a dash and a unique three-digit code. The three-digit code is incremental and starts at 001 for each region. The WHA Tracking form should be referenced for the next available WHA Tag in each MWLAP region. See *Tracking the Status of WHAs* below.

The Step 2 process involves the following:

Initial Evaluation of Proposed WHA

Initial evaluation of each proposed WHA ensures that the biological requirements have been met and are consistent with those specified within the *Accounts and Measures for Managing Identified Wildlife* document. Where applicable, presence of the habitat feature or the Identified Wildlife element will be confirmed by the MWLAP regional designate or qualified individual. Consistency with the appropriate higher-level plan or sustainable resource management plan should also be verified, if applicable.

Land Status of the Proposed WHA

The WHA polygon(s) must occur, in its entirety, on provincial Crown land or private land that is part of a tree farm or woodlot license (as outlined in Appendix 8).

Overlap with Cutting Permits, Road Permits, Declared Areas, and Category A Cutblocks

Where forest tenure holders have been involved in Step 1 boundary delineation, there should be no cutblock conflicts with proposed WHAs. Where boundaries have been delineated in the absence of forest tenure holders, the MWLAP regional desig-

nate must contact forest tenure holders to determine if the proposed WHA(s) overlaps with approved cutting permits, road permits or declared areas under the FRPA.

Where forest tenure holders continue to function under a Forest Development Plan during transition to the FRPA, the Ministry of Forests district manager should be contacted to determine if the proposed WHA(s) overlaps with approved category A cutblocks where a cutting permit has been issued or an assessment completed, as per section 22(1) of the *Operational and Site Planning Regulation* of the Forest Practices Code.

Boundary Changes

Boundary changes during Step 2 technical review may be made for, but are not limited to, the following reasons:

- To ensure the proposed WHA is consistent with the biological requirements specified within the *Accounts and Measures for Managing Identified Wildlife* document;
- To ensure the boundary occurs entirely on provincial Crown land;
- To use landforms/features to make boundaries easier to locate in the field; and/or
- To allow forest access and minimize timber isolation.

Any changes made to the proposed boundaries by the MWLAP regional designate should be done in cooperation with the proponent and in accordance with biological criteria as specified in the relevant element account in the *Accounts and Measures for Managing Identified Wildlife* document.

Step 2 Decision

The decision to endorse or reject the proposed WHA(s) must be made by a qualified registered professional or qualified individual as specified by the MWLAP regional designate. This decision must be based on whether the proposal meets the following requirements:

- The proposal is consistent with biological requirements as specified in the *Accounts and Measures for Managing Identified Wildlife* document.
- The proposed WHA lies entirely on provincial Crown land.
- The proposal is based on field verification of species occupancy and presence of the habitat feature. If the *Accounts and Measures for Managing Identified Wildlife* account allows WHAs based on map interpretation or WHAs designed to restore previously occupied habitats, field verification of occupancy is not required.
- The proposal is within the current timber supply impact budget (does not require a timber supply impact analysis at this stage).
- Consistency with the appropriate higher-level plan or sustainable resource management plan must also be verified where a plan or plans exist.

The Step 2 decision date should be noted on the WHA data form. The decision rationale should be documented and available for review upon request.

Notification of the Step 2 Decision

The proponent will be notified if the proposal is rejected at Step 2. A WHA is considered a candidate when accepted at Step 2.

The suggested time frame for Step 2 is 14 days, or as applicable if field verification is required.

Step 3. Review and Comment of Candidate WHA

Review and comment enables affected parties and government agencies to submit comments on WHA candidates. The MWLAP regional designate is responsible for the Step 3 review and comment of candidate WHAs. Early involvement of affected parties, specifically forest tenure holders, in the WHA establishment process will greatly reduce the likelihood of unforeseen impacts and will help to expedite Step 3 review and comment.

Determining Affected Parties

An affected party is defined as anyone with existing or tenured forest, range, petroleum or mining interests within the proposed WHA, as well as First Nations. The names of affected forest and range

tenure holders can be obtained from the Ministry of Forests district manager. The MWLAP regional designate is responsible for identifying any surface or subsurface tenure holders, First Nations or any other applicable affected parties whose tenure overlaps the candidate WHA(s). See Appendix 3 for steps to obtain information on surface and subsurface tenure holders.

Review and Comment

The MWLAP regional designate is responsible for ensuring that a Step 3 review and comment package is sent to affected parties and government agency representatives. Written comments on the proposed WHA(s) will be requested within 40 days of receiving the review and comment package.

The Ministry of Forests district manager is to document any impacts of the proposed WHA to forest and range operations and development in the district, including, but not limited to, the following:

- Cases where proposed GWMs render potential harvest uneconomical;
- Conflict with forest access routes to areas inside and outside the candidate WHA;
- Impacts related to timing of harvest, timing of range-related activities, timing of haul or other timber harvesting, or range restrictions proposed by GWMs on planned operations; and/or
- Any other impact or conflicts related to planned forest or range development in the area.

When a forest tenure holder continues to function under a Forest Development Plan during transition to the FRPA, the district manager should document conflicts with category A blocks, proposed blocks, active cutting permits, and timber sale licenses not identified during land status examination.

The affected parties and government agency representatives include:

- Forest tenure holders;
- Range tenure holders;
- Surface and subsurface tenure holders;
- First Nations;
- the Ministry of Forests district manager; and
- the Land and Water BC regional designate.

For details of the First Nations review and comment process, please see Appendix 4.

Where possible, the review and comment package should be forwarded to affected parties by e-mail with associated files electronically attached. Hardcopies of the review and comment package can be sent on request. Surface and subsurface tenure holders will need to be sent packages via mail because e-mail addresses will not be available. The review and comment package should include an e-mail/cover letter with the following information (see Appendix 5 for an example e-mail):

- Relevant biology about the Identified Wildlife element (status, how the WHA will serve to protect the species). The relevant species account from *Accounts and Measures for Managing Identified Wildlife* can be attached as additional information.
- The candidate GWMs, indicating clearly where any modifications have been made.
- Reference to any WHFs contained in the candidate WHA(s).
- Request for voluntary establishment of interim protection for candidate WHAs and an estimated time frame for the Step 6 decision.
- Attached jpg or pdf of 1:20,000 TRIM base map of the candidate WHA polygon(s) identified by WHA ID number. This map should also include the locations of any known WHF(s) (see Appendix 8).
- The time frame allotted for comments (40 days).

Modifying a GWM During Review and Comment

A modification(s) to the GWM may be suggested by the MWLAP regional designate, as well as by any of the affected parties during review and comment. Modifications to the GWM may be for both biological and site-specific considerations, but every attempt should be made to not reduce the biological integrity of the WHA (for more details, see *Modifying a WHA or GWM* below).

Completion of the Review and Comment Process

If the 40-day period for written comment has passed with no response from an affected party, a follow-up phone call is recommended. After a reasonable effort has been made to contact affected parties, the review and comment process will be considered completed. Affected parties who do not respond within the allotted time frame are assumed to have no concerns with the candidate WHA(s). See Appendix 4 for specific requirements for review and comment involving First Nations.

Unresolved Issues

To the fullest extent possible, all disputes involving agencies and affected parties in the region should be resolved at the regional level. If significant unresolved issues remain, a detailed briefing of the unresolved issue(s) will be prepared on behalf of the MWLAP environmental stewardship regional manager for the MWLAP delegated decision maker. The briefing will include statements from affected parties outlining their positions around the unresolved issue(s) and any recommendations and/or options. The briefing should be submitted to Victoria with the final WHA package.

Submitting WHA Package to MWLAP in Victoria

Upon completion of the review and comment process, the MWLAP regional designate will compile comments and prepare the WHA package to be forwarded to the IWMS data coordinator in Victoria. The WHA package should be forwarded by e-mail with associated files attached electronically.

The WHA package should include the following:

- WHA data form completed to Step 3.
- Final polygon boundaries captured digitally as an ArcInfo coverage or shapefile (see *Digital Standards for Submission of Candidate WHAs to Victoria* in Appendix 8).
- Any biological and operational impact information gathered during site selection, boundary determination, and review and comment.
- Comments collected during the review and comment process. If no unresolved issues remain, forward only the final correspondence with the affected party indicating their support or no concern for the candidate WHA(s). All other comments should be kept on file in the region in case they are needed later. If unresolved or disputed issues remain, include a detailed briefing for consideration by the MWLAP delegated decision maker (see *Unresolved Issues* above). Where applicable, include all e-mail correspondence, letters and documented content of any phone conversations pertaining to the unresolved or disputed issue(s).

Timber Supply Impact Analysis

Upon completion of the review and comment process, the MWLAP regional designate will submit WHA boundaries (in digital GIS format) to the Ministry of Forests timber supply analyst.

In most cases, the Ministry of Forests regional timber supply analyst, in consultation with Ministry of Forests district and industry, will be determining the impact. It is recommended that forest tenure holders complete the timber supply impact analysis for candidate WHAs on tree farm licences. Timber supply impact analysis will not be required for every WHA submission to the MWLAP delegated decision maker. Analyses will be completed and tracked quarterly (April 30, July 31, October 31, January 31), or as required. At the time of each WHA submission, the MWLAP delegated decision maker will be apprised of the district budget and the risk of exceeding the budget with the current submission. Risk for most WHAs is expected to be low, allowing tabulation of impacts to occur quarterly. For higher risk WHAs, the MWLAP delegated decision maker may request that an impact analysis be completed and the cumulative district timber supply impacts updated before approving a WHA submission.

If there are Ministry of Forests district or forest tenure holder concerns regarding the impacts of a candidate WHA(s), the MWLAP regional designate, Provincial WHA Committee, or the Ministry of Forests district manager may request that a

timber supply impact analysis be completed and the cumulative district timber supply impacts updated before Step 6 submission (for more details, see *Measuring and Tracking Timber Supply Impacts – Determining Impact on Each WHA* below).

The suggested time frame for Step 3 is 60 days.

Step 4. Preparation of Final WHA Package

The IWMS data coordinator (MWLAP, Victoria) is responsible for preparing the review package for the Provincial WHA Committee. The review package should include (1) the WHA summary file (see Appendix 6 for details), (2) final map boundaries, and (3) the timber supply impact information, including the current district budget and the risk of exceeding the budget with the current submission. If needed, the completed timber supply impact analysis will be available for review. Individual affected party comments are available for the Committee on request. At this stage, any significant opposing comments are brought forward for individual consideration.

The Geographic Information Systems (GIS) data coordinator (MWLAP, Victoria) is responsible for ensuring that the final WHA boundary maps are produced for inclusion in the package for review by the Committee and ultimately by the MWLAP delegated decision maker (see *Procedures and Standards for Step 4 Mapping and Step 7 Data Warehousing* below). If required, separate maps indicating adjacent land status and tenure will be produced for review by the Committee.

The suggested time frame for Step 4 is 20 days.

Step 5. Review by the Provincial WHA Committee

The Provincial WHA Committee will meet to review and discuss each WHA proposal. Committee members will examine each proposal for consistency with standards and to ensure that each WHA proposal is within current timber supply impact levels (see Appendix 7 for terms of reference). If there are major changes to the candidate WHA(s) after this review, the Committee can choose to refer the proposal back to the MWLAP regional designate and proponent for consideration. Upon closure of the review by the Committee, a recommendation for each WHA and any unresolved issues will be prepared and forwarded for consideration by the MWLAP delegated decision maker.

The suggested time frame for Step 5 is 30 days.

Step 6. Decision (MWLAP Delegated Decision Maker)

WHAs will be brought forward with the required documentation (final map, timber supply impact information, WHA summary form, and affected party comments) to the MWLAP delegated decision maker. If required, WHA proposals will be sent back to the MWLAP region for further review and comment around unresolved issues.

Step 7. Notice of Decision, Impact Tracking, and Warehousing of Approved WHA Boundaries

Notice of Decision

Notice of approved orders will be posted in the BC Gazette and on the IWMS website. The approved order must be filed with the appropriate forest region. E-mail notification of approved WHAs will be sent by the IWMS data coordinator to the proponent, Ministry of Forests (Forest Practices Branch, region and district manager), Ministry of Energy and Mines (Corporate Policy, Planning and Legislation Division, and district manager), Oil and Gas Commission (Resource Officer, Applications and Approvals Branch), MWLAP (environmental stewardship regional manager and regional IWMS designate), Ministry of Sustainable Resource Management regional director, Land and Water BC regional designate, and all affected parties contacted during review and comment.

Notification will include a list of the approved WHAs, approved GWMs, and a link to the WHA ftp site to obtain final approved WHA boundaries. If the WHA contains sensitive information about Species at Risk, agencies will be notified to ensure

that these data are not included on district maps (see *Policy on Sensitive Information about Species at Risk* below). If electronic notification is not possible, information, including hardcopy maps, will be sent by mail.

The Ministry of Forests district manager will continue to "make known" approved WHAs and GWMs to forest tenure holders who function under a Forest Development Plan during the transition period to FRPA. The IWMS data coordinator will contact the Ministry of Forests district manager with the information required to be made known.

When Orders Take Effect

Under the FRPA, approved WHAs and GWMs take effect on the later of (1) the date that notice of the order is posted on the IWMS website, or (2) the date that notice of the order is published in the BC Gazette. A person preparing a forest stewardship plan must ensure that the plan identifies WHAs that are in effect 4 months before the date the plan is submitted to the Minister for approval.

For licensees continuing to function under a Forest Development Plan, approved WHAs and GWMs still take effect on the date that notice of the order is published in the BC Gazette. A forest tenure holder must include a WHA on an operational plan if the approved WHA is made available by the district manager at least 4 months before the operational plan is submitted for approval.

Timber Supply Impact Tracking

The Ministry of Forests regional timber supply analyst or forest tenure holder will provide the IWMS data coordinator with the appropriate impact information after the quarterly review period, or as requested. The IWMS data coordinator is responsible for tracking individual and cumulative impacts of the approved WHAs at the district and regional levels. After each quarterly review, or as requested, the IWMS data coordinator will provide a summary report of the timber supply impacts of the candidate/approved individual WHA and the cumulative impacts of all existing WHAs to the MWLAP delegated decision maker, Provincial WHA Committee, MWLAP regional designates and Ministry of Forests district managers.

Warehousing of Approved WHA Boundaries

The IWMS GIS data coordinator is responsible for the digital archiving of approved WHA boundaries and for maintaining the provincial digital coverage of approved WHAs in the Ministry of Sustainable Resource Management (MSRM) spatial data warehouse. A current copy of the Provincial WHA map is stored in the MSRM spatial data warehouse and is accessible to provincial government agencies through the MSRM GOAT mapping tool under the theme group "Wildlife-Habitat." The IWMS GIS data coordinator is responsible for adding approved WHAs to the Approved WHA ftp site. Files on the ftp site contain individual WHA boundaries formatted as an ArcInfo coverage and include a plot file for printing maps of the WHA. Approved WHA boundaries will also be available through the Ministry of Energy and Mines' The MapPlace: <http://www.em.gov.bc.ca/Mining/Geolsurv/MapPlace/default.htm>.

Internet Access to Information about the IWMS

An internet site is available through the MWLAP Biodiversity Branch IWMS website: <http://wlapwww.gov.bc.ca/wld/identified/index.htm>.

This website provides information on the implementation of the IWMS, the species and plant communities that make up the strategy, implementation advice and updates, and proposed, candidate and approved WHAs. For security purposes, all WHAs are identified by WHA proposal numbers without reference to the relevant species. To obtain additional information about an approved, proposed or candidate WHA, contact the appropriate Regional MWLAP office.

Tracking the Status of WHAs

The IWMS data coordinator is responsible for tracking the status of proposed, candidate and approved WHAs. Tracking information is maintained in a database in Victoria that is accessible to MWLAP regional designates. The tracking form is designed to track individual WHAs through the steps to WHA establishment and also serves to maintain a central database of WHA information, to facilitate requests for WHA information, and to allow the IWMS data coordinator to anticipate when WHAs will be arriving in Victoria at Step 4. The IWMS data coordinator will contact the MWLAP regional designates monthly to update WHA tracking information.

Modifying a WHA or GWM

Modifying a WHA Boundary or Rescinding a WHA

A WHA can be modified or removed as a result of new information. This may be because more appropriate sites have been located, the impact of the WHA has been determined to be significantly higher than initially predicted, the site no longer has the values as originally proposed, or changes to the WHA boundary have been recommended by the Provincial WHA Committee. The request for modification or removal of a WHA boundary is submitted to the MWLAP delegated decision maker. The request should provide a detailed rationale for modification or removal and, in the case of a boundary modification; the request should include a detailed map outlining the proposed boundary modification. The MWLAP delegated decision maker may choose to refer the request through the review and comment process, in which case steps 3 through 5 are followed.

Modifying a GWM During Review and Comment

A modification(s) to the GWM may be suggested by the MWLAP regional designate, as well as by any of the affected parties during review and comment. A modification to a GWM includes any revision to a GWM beyond what was included in the element account in the *Accounts and Measures for Managing Identified Wildlife* document. Modifications to the GWM may be for both biological and site-specific considerations. The ability to modify a GWM is important for site-specific situations including, but not limited to, the following:

- A GWM is not biologically appropriate.
- Roads or practices previously occurred in a WHA.
- A WHA may cause unanticipated impacts on forest, range, mineral or petroleum interests.

A modification request should include a justification. During Step 3 review and comment, the MWLAP regional designate decides whether to include a suggested modification to the GWM. When making this decision, the MWLAP designate should examine both biological and socio-economic considerations. However, every attempt should be made to not reduce the biological integrity of the WHA. When modifying a GWM, the modified wording should be marked in bold for clarity. If a dispute over a modified GWM remains after the Step 3 review and comment, each party should prepare a submission to accompany the WHA package to the Provincial WHA Committee and the MWLAP delegated decision maker.

The MWLAP delegated decision maker can modify a GWM as part of the WHA decision process.

GWM Compliance and Exemption under the FRPA

Under the FRPA, operational practices must comply with established GWMs. However, affected parties may apply for an exemption to a GWM.

Appendix 9 outlines the requirements for complying with a GWM and the exemption provisions

provided under the *Forest Planning and Practices Regulation*, *Range Planning and Practices Regulation*, and *Woodlot License Planning and Practices Regulation* of the FRPA.

Approval of an exemption is a decision that has both operational and biological implications for the site and often requires input from both the forest tenure holder and the district manager. The Minister or designate may choose to impose conditions on the exemption.

Where an exemption is granted it must

- be in writing;
- specify when the exemption comes into effect;
- be sent directly to the proponent; and
- be filed in the appropriate forest district office.

Approving Variances to Legal GWMs

Where forest tenure holders continue to function under a Forest Development Plan, variances to legal GWMs must be approved by the MWLAP statutory decision maker. The approval of a variance is a decision that has both operational and biological implications for the site and often requires input from both the forest tenure holder and the district manager.

The process for approving a variance to a legal GWM is as follows:

- Anyone can request a variance to a GWM by contacting the appropriate MWLAP statutory decision maker.
- The MWLAP statutory decision maker or designate approves, rejects or recommends revisions to the variance request. Where appropriate, comments and concerns may be solicited from affected parties.
- The proponent and affected parties are notified of approved variances.

Interim Protection for Candidate WHAs

Protection allotted to WHFs under the FRPA will serve as the basis for interim protection of candidate WHAs during the establishment process. Under the FRPA regulation, a WHF must not be rendered ineffective by activities such as timber harvesting, silviculture treatments, road construction, road maintenance or road deactivation. It is intended that the WHFs associated with all Identified Wildlife will be protected under this designation.

Where a WHF exists within a candidate WHA, all affected parties will be notified of the location and protection allotted to the WHF(s) during Step 3 review and comment. In addition, the Step 3 review and comment letter will ask that affected parties establish voluntary protection of the entire candidate WHA, consistent with the candidate GWMs, until the Step 6 decision is made by the MWLAP delegated decision maker. The letter asking for interim protection must indicate an estimated date for the Step 6 decision, normally within 5 months of notifying affected parties. Affected parties will be notified of the Step 6 decision to accept or reject the candidate WHA(s).

Procedures for Updating The List of Identified Wildlife

Regular Updates

The list of Identified Wildlife (Species at Risk and Regionally Important Wildlife) is intended to be updated annually. Changes may be made to the Identified Wildlife list when any of the following occur:

- The status changes (e.g., provincial or national, up-listing, down-listing, de-listing, or an unlisted element becomes listed);
- New information becomes available;

- The known occurrence changes;
- Taxonomic and/or name change occurs; or
- Recovery team recommends an addition or deletion.

For an Identified Wildlife element to be added to or removed from the list, supporting documentation (including the element account) must be provided and reviewed by an appropriate expert and stakeholder Technical Advisory Committee. Any changes to the list of Identified Wildlife will be presented, with supporting documentation, to the MWLAP delegated decision maker for approval.

Emergency Listings

To ensure that "emergency" situations can be addressed within the IWMS, an element can be added at any time to the Identified Wildlife list based on a recommendation of the director of the Biodiversity Branch, MWLAP. However, the following must be demonstrated (from COSEWIC Organization and Procedures Manual 2001):

"...it must be demonstrated that there is clear and imminent danger of serious decline in the species population and/or range, or that such a decline is already in progress and will continue unless immediate corrective actions are taken, and that delay may contribute to the species' jeopardy. Present and past population sizes and ranges and rate of decline in both, if known, should be provided. The imminent or existing threats, especially those believed to be contributing to the emergency situation, should be clearly stated. If possible, a prognosis for the future of the species, with and without emergency assessment, should be included."

In the case of an emergency listing, the element account will not be required to be completed. Emergency listing(s), including supporting documentation, will be presented to the appropriate expert and stakeholder Technical Advisory Committee for information and the MWLAP delegated decision maker for approval.

Notification of Updates

All updates will be posted on the IWMS webpage within 1 month, and notification of the order will be published in the BC Gazette.

Planning Thresholds

When Volume 1 of the IWMS was released, government set a limit of 1% to the allowable impact to short-term harvest levels that may result from implementing measures for Identified Wildlife. The limit was set at 1% of the provincial harvest at the end of 1995, and was designed to be incremental to the pre-Forest Practices Code Timber Supply Review I. Impacts were to be managed to 1% per forest district until further direction was available for regional allocation of limits.

The regional allocation of the 1% budget has not been reviewed to date. Current policy requires that the 1% district threshold be applied when tracking timber supply impacts of approved WHAs. It is now recognized that due to limitations of the data from Timber Supply Review (TSR) I, databases from TSR II or III must be used as the basis for the 1% planning threshold.

For WHAs that are contained within the area of the Cariboo Chilcotin Land Use Plan, timber supply impact will be managed through balancing all resource objectives and strategies to meet the targets of higher-level plans.

Measuring and Tracking Timber Supply Impacts

Introduction

To apply the planning thresholds, the timber supply impacts for each WHA must be determined and tracked. A clear and consistent measurable definition of timber supply impact that is directly comparable to the chief forester's allowable annual cut determination is not always available.

Measurement of a timber supply impact through strategic-level tools, such as forest estate (i.e., timber supply analysis) models applied at a management unit level, cannot adequately or consistently be used to determine timber supply impacts

on a WHA, which is a relatively small area compared to a management unit. Due to the small size, the sensitivity of harvest flow is often less than the impact on the land base, and spatial management constraints applied to a WHA in a model may not reflect impacts that might exist operationally.

To enable a relatively consistent measure of timber supply impact, an approach based on inventory area was chosen. In this approach, the impact is the amount of timber harvesting land base within a WHA that becomes unavailable for harvest within the time frame of current management policy. An impact on the overall timber harvesting land base reflects long-term timber supply. The 1% impact policy is directed at short-term timber supply that in many cases is better reflected by the current mature inventory. As such, it is reasonable to consider the appropriate impact to be the mature timber harvesting land base within a WHA that becomes unavailable for harvest within the time frame of current management policy.

The impact assessment must include the impact within the WHA that is removed from the timber harvesting land base or has increased the implied harvest rotation due to more restrictive management. Where harvesting is allowed, but under a more restrictive management regime, the assessment should be expressed as an equivalent timber harvesting land base deduction. Example of methods of determining a coarse estimate of equivalent timber harvesting land base include calculating differences in maximum retention requirements or calculating the increase in the implied rotation of the management. The assessment must also consider timber harvesting land base outside of the WHA that may be alienated due to restrictions (e.g., road) associated with the WHA. As such, it is possible for the area impact of a WHA to be more than the WHA itself. In addition, more information on volume-based impacts may be included in the analysis where the analyst feels this is necessary.

IWMS Volume 1 documentation identifies the end of 1995 as the basis for planning thresholds. Deficiencies in the available data and inconsistent management objectives for this period do not allow for a consistent approach to determining impacts. Data and management practices of the second (1997–2001) or third (2002–2006) timber supply review periods are more consistent and available. Although the second review period includes policy changes associated with the Forest Practices Code, this era of information will form the basis of the impact assessment and tracking. Decision-makers need to consider this base difference when considering the interpretation of planning thresholds and timber supply impact statistics. In some management units, the second or third timber supply review analysis (TSR II or III) analysis has accounted for approved WHAs. In these cases, the impacts of approved WHAs must be considered when calculating the 1% threshold and the timber supply impacts of candidate WHAs.

Because of the uncertainties in the selection of impact measures, a single impact statistic is probably inadequate information for the MWLAP delegated decision maker. For the impact assessment, multiple statistics will be determined based on the total and mature equivalent timber harvesting land base impacted within a WHA compared to an administrative land base. For short-term indicators, the mature equivalent timber harvesting land base in WHAs will be compared to total mature timber harvesting land base in age classes older than minimum harvestable ages (60, 80, 100, 120, 140, and 250 years) within an administrative unit. For a long-term indicator, the total equivalent timber harvesting land base in WHAs will be compared to the total timber harvesting land base within an administrative unit. Statistics will be developed at a Ministry of Forests district, regional, and provincial level.

There are three components of determining, tracking, and reporting the timber supply impacts. The first component is to summarize the provincial working forest land base. This information forms the denominator of the planning thresholds. The second component is to calculate the individual timber harvesting land base impacts within each WHA. The third component is to maintain

this information and report it for the decision-making process. These three components are described below in more detail.

Determining the Ministry of Forests District Timber Harvesting Land Base Summaries

This section identifies the steps in summarizing the landbase of tree farm licences and timber supply areas. This information forms the basis for calculating the impact as a percentage of a district or region. The steps in this section have been completed.

1. Branch, regional, and forest tenure holder timber supply analysts provides the following TSR II area summaries to the Forest Analysis Branch (Ministry of Forests) for available timber supply areas and tree farm licences: gross area, current timber harvesting land base, long-term timber harvesting land base, and timber harvesting land base with ages older than minimum harvestable ages.
2. The Forest Analysis Branch (Ministry of Forests) compiles and provides a database of the above areas for each timber supply area and tree farm licence: Where possible, this information is based on data used for the second timber supply review, otherwise the best available information is used. This information is provided to the IWMS coordinator in a Microsoft Excel spreadsheet format that is linked to WHA impacts.
3. The IWMS coordinator maintains the Excel spreadsheet of the management unit summaries.

Determining Impact on Each WHA

Timber supply impact analysis will not be required for every WHA before submission to the MWLAP delegated decision maker. Timber supply impact analyses will be completed and tracked quarterly (April 30, July 31, October 31, and January 31), or as required. At the time of each WHA submission, the MWLAP delegated decision maker will be apprised of the district budget and the risk of exceeding the budget with the current candidate WHAs. It is expected that risk for most WHAs will be low, allowing tabulation of impacts to occur quarterly. For higher risk WHAs, the MWLAP delegated decision maker may request that an impact analysis be completed and the cumulative district timber supply impacts updated before the WHA submission is approved. If Ministry of Forests district or forest tenure holder have concerns regarding the impacts of a WHA(s), the MWLAP regional designate, Provincial WHA Committee, or the Ministry of Forests district manager may request that a timber supply impact analysis be completed and the cumulative district timber supply impacts updated before Step 6 submission.

This section identifies the steps in calculating the timber supply impact of an individual WHA in terms of equivalent total and mature timber harvesting land base.

1. Upon completion of the review and comment process, the MWLAP regional designate will submit WHA boundaries (in digital GIS format) to the Ministry of Forests timber supply analyst. In most cases, the Ministry of Forests regional timber supply analyst, in consultation with Ministry of Forests district and industry, will be determining the impact. It is recommended that forest tenure holders complete the timber supply impact analysis for candidate WHAs on tree farm licences.
2. Final WHA boundaries should be submitted to the analyst in digital (GIS) format consistent with the *WHA Mapping Protocol* (see Appendix 8).
3. Any operational impact comments or concerns received from forest tenure holders or the forest district during review and comment must be forwarded to the analyst.
4. The analyst will obtain necessary data that describe the landbase within the WHA from appropriate sources. The necessary data must enable area summaries of the WHA for gross area, timber harvesting land base, and management zones. It is likely that these data will be obtained from the Ministry of Sustainable Resource Management and will be based on TSR

II (1997–2001). In some cases, it may be desirable to obtain the data from other sources (e.g., actual ground survey) if the available inventory data do not adequately describe the WHA.

5. From the WHA dataset, the analyst as a minimum will report the gross, the timber harvesting land base, and the mature timber harvesting land base areas of the WHA. The analyst will note the source of the data, the basis of the timber harvesting land base determination (e.g., TSR II), and how "mature" is defined.
6. From the WHA documentation and the IWMS Version 2004 species accounts, the analyst will determine if the WHA and its measures will restrict timber supply more than it would have been based on management considered during TSR II. If the WHA is more restrictive, the analyst will determine and report the equivalent timber harvesting land base impact and the equivalent mature timber harvesting land base impact.
7. If the WHA prohibits harvesting completely, the equivalent impacts are simply the timber harvesting land base and the mature timber harvesting land base within the WHA, including any area determined to be isolated as a result of the WHA. The analyst will select an appropriate definition of mature that considers the minimum harvestable ages identified within the TSR II analysis. Most often a single age criteria will be sufficient.
8. If the impact is not simply preservation of the entire WHA but includes more restrictive management, the approach to determining equivalency (e.g., change in implied rotation) will be at the discretion of the analyst, but should be consistent with approaches used in other WHAs and in other regions.
9. If the impact includes an impact that is outside of the WHA (e.g., due to access issues), the outside impact must also be determined and reported as equivalent timber harvesting land base impact and equivalent mature timber harvesting land base impact.
10. The analyst will present the impact summary in the format desired by the IWMS coordinator for placement in the provincial database. The minimum information to be presented is: for the WHA—the gross area, the timber harvesting land base, and the mature timber harvesting land base; and for the impact—the equivalent timber harvesting land base and the equivalent mature timber harvesting land base. Short footnote comments to be documented with the provincial database should also be made. The analyst should also provide a separate written summary showing the steps followed in calculating the impacts. In addition, the analyst can provide alternative timber supply impact assessments or other information that the analyst feels will be useful in assessing the WHA, such as volume-based impacts.
11. Analyses completed by forest tenure holders (tree farm licence holders and other proponent forest tenure holders) should be submitted to the Ministry of Forests timber supply analyst and MWLAP regional designate for comment. Analysis completed by the Ministry of Forests regional timber supply analyst should also be sent to the forest tenure holder and MWLAP regional designate for comment.

Reporting Cumulative Impacts

1. The regional timber supply analyst or forest tenure holder will provide the IWMS coordinator with the appropriate impact information (as described above) after the quarterly review period.
2. The IWMS coordinator will update and be responsible for maintaining the spreadsheets that provide the individual and cumulative impact summary of the approved WHAs at the district and regional levels. These spreadsheets were created by Forest Analysis Branch for the Provincial IWMS Committee in 2001.
3. After each quarterly review, or as required, the IWMS coordinator will provide a summary report of the timber supply impacts of the candidate/approved individual WHA and the cumulative impacts of all existing WHAs to the MWLAP delegated decision maker, Provincial

WHA Committee, MWLAP regional designates and Ministry of Forests district managers.

Measuring and Tracking Range Impacts

Impacts to individual ranchers will be measured and tracked by the Ministry of Forests district where necessary.

Implementing the IWMS Consistent with Higher-Level Plans and Sustainable Resource Management Plans

Where a higher-level plan(s), sustainable resource management plan(s), and/or Cabinet-approved strategic land-use plan(s) exist, implementation of the IWMS must be done in accordance with the objectives and targets contained within the higher-level plan, sustainable resource management plan, and/or strategic land-use plan. The review of candidate WHAs must include a review for consistency with any targets, objectives and strategies of an existing higher-level plan, sustainable resource management plan, and/or strategic land-use plan. Documentation sent to the MWLAP delegated decision maker must include confirmation that the candidate WHAs are consistent with the objectives and timber supply impacts of the higher-level plan, sustainable resource management plan, and/or strategic land-use plan.

Energy and Mineral Resources

The primary goal of the IWMS is to reduce the impacts of forest and range practices on Identified Wildlife. This section provides greater clarity and guidance on managing mineral and energy exploration and development activities in relation to the IWMS, as well as on the role of the Ministry of Energy and Mines in implementing the Strategy.

The *Mineral Tenure Act* of May 2002 created a two-zone land-use system for mineral exploration and mining in British Columbia. WHAs are included within the "mineral zone" designation. Staking of claims and exploration and development activities may occur in WHAs in accordance with existing legislation and required environmental regulations and approvals. The GWMs for a WHA can accommodate claim staking, access, exploration and development of subsurface resources. Activities that mechanically disturb the surface of the ground, including road and trail construction, are allowed subject to specific permit conditions designed to minimize potential impacts on Identified Wildlife, the environment, and other special values.

The number of WHAs is limited and they are generally small, therefore the possibility of a direct conflict with subsurface resource development is relatively small. Where subsurface exploration or development overlaps with WHAs, cooperative, flexible management approaches will be implemented to ensure that mineral and energy development activities may occur within existing legislation and required environmental regulations and approvals, while at the same time mitigating impacts to Identified Wildlife.

The mineral or energy sector can recommend that a WHA boundary be modified or rescinded where new subsurface information or activities may lead to impacts on a WHA (see *Modifying a WHA Boundary or Rescinding a WHA* above). An alternative WHA that reduces conflicts may be proposed, where appropriate.

Energy and Mineral Activities

Planning

Affected mineral tenure holders will be notified of approved WHAs and also candidate WHAs during affected party review and comment. The boundaries of all approved WHAs will be available through The MapPlace (http://www.em.gov.bc.ca/Mining/Geolsurv/MapPlace/default.htm) to assist in planning proposed energy and mineral development activities. Proponents planning mineral or energy exploration or development activities should check with the MapPlace for the location of approved WHAs. Details on the GWMs associated

with approved and candidate WHAs can be obtained through the appropriate MWLAP regional designate.

Permits

The Ministry of Energy and Mines will be the primary regulator of mineral sector activities on mineral, coal and placer tenures within WHAs, through the *Mineral Tenure Act, Mines Act, Coal Act* and the *Mineral Exploration Code*. The Oil and Gas Commission will be the primary regulator of activities on oil and gas permits through the *Petroleum and Natural Gas Act*. Management of mineral and energy activities within WHAs will follow the approved GWMs. Exemptions to the GWMs may be approved in cases where they are necessary to accommodate site-specific conditions and activities.

Since proposals for energy and mineral exploration and development work within existing WHAs will be reviewed in the context of GWMs, permit approvals will be expedited if proponents design their work programs accordingly.

Decisions on how impacts to WHAs are to be prevented or mitigated are made in the permitting process and reclamation plans are required. Where disturbances to other resources cannot be avoided, temporary or even permanent impacts may occur. It is important to recognize that these higher impact and higher cost mineral activities are closely scrutinized by government and occur only when there is a strong potential for successful development and for social and financial benefit from mining.

Ministry of Energy and Mines and Oil and Gas Commission Involvement

Review and Comment of Candidate WHAs

Affected mineral tenure holders will be contacted by the MWLAP regional designate during Step 3 review and comment. A Ministry of Energy and Mines contact person will be available to answer questions from affected surface or subsurface tenure holders during the review and comment period.

Provincial WHA Committee

At the provincial level, the Ministry of Energy and Mines will be represented on the Provincial WHA Committee, which evaluates each WHA proposal before it is forwarded to the MWLAP delegated decision maker for decision. If there are conflicts with mineral or energy resource interests, the Committee will forward these to the MWLAP delegated decision maker.

Notification of Approved WHAs

Notification of approved WHAs and their associated GWMs will be sent to affected surface and subsurface tenure holders, as well as to the Ministry of Energy and Mines and the Oil and Gas Commission. Approved WHA boundaries will be available through The MapPlace <http://www.em.gov.bc.ca/Mining/Geolsurv/MapPlace/default.htm>.

Policy on Sensitive Information about Species at Risk

Section 18 of the *Freedom of Information and Protection of Privacy Act* states:

> The head of a public body may refuse to disclose information to an applicant if the disclosure could reasonably be expected to result in damage to, or interfere with the conservation of,
>
> a) fossil sites, natural sites, or sites that have an anthropological or heritage value;
>
> b) an endangered, threatened or vulnerable species, subspecies or race of plants, vertebrates or invertebrates; or
>
> c) any other rare or endangered living resource.

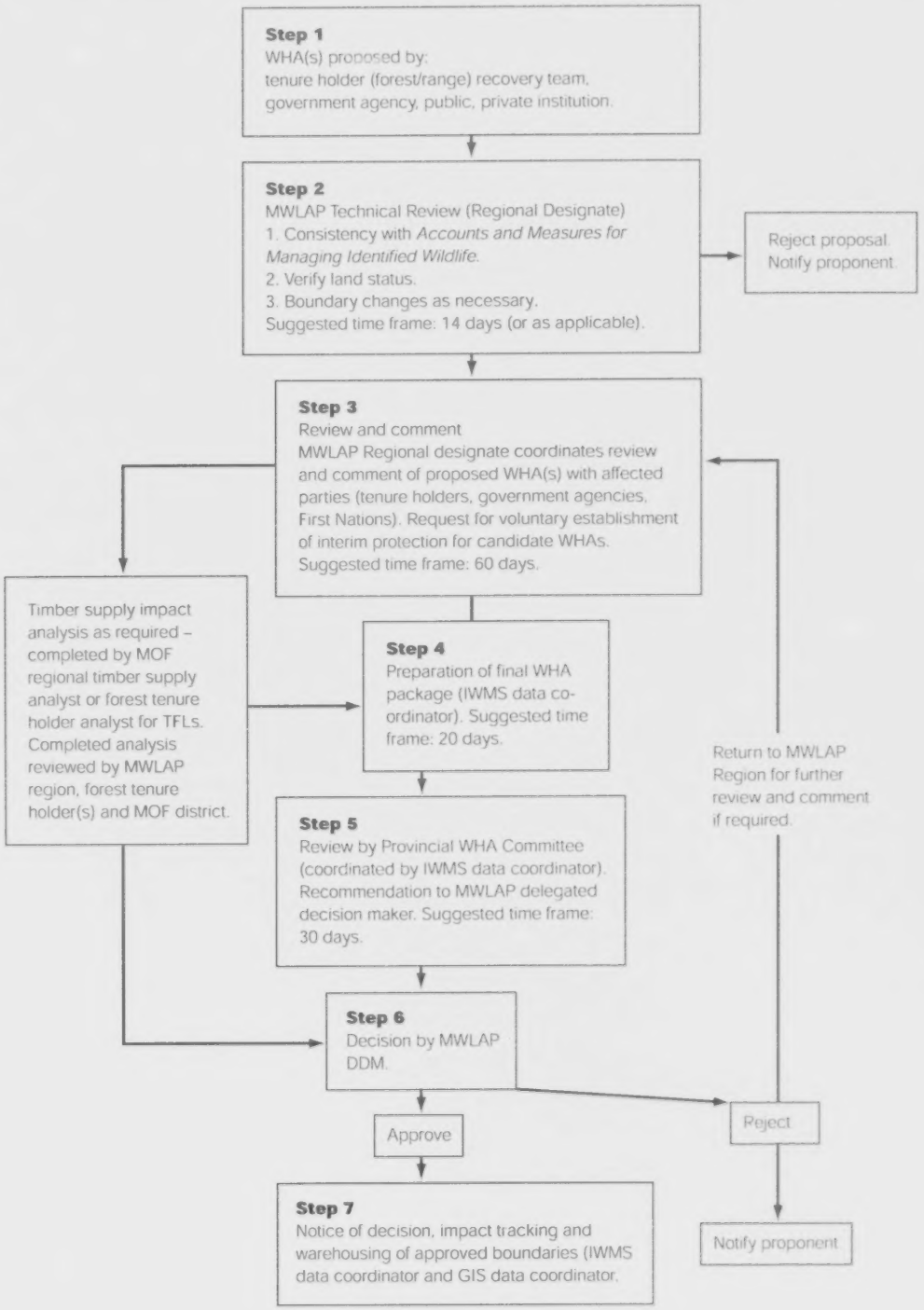
Government policy on disclosure of sensitive information on Species at Risk is outlined in the *Information and Privacy Handbook, and Freedom of Information: Formal Access Requests - Policies on Exceptions C.4.9.*

Ministry staff will routinely disclose information on most Species at Risk, except in cases where

disclosure could interfere with the conservation of that species. For example, disclosing the location of some snake or bat hibernacula through publication of a WHA could result in direct persecution of the animals at those sites. As well, the location of nest sites of some birds (particularly falcons) should not be disclosed to prevent illegal collection of eggs.

If a WHA may be sensitive to damage or disturbance, the MWLAP delegated decision maker must make the location of the WHA known to affected parties, but may request that the affected party not disclose the location of the WHA, except in terms that are not precise enough to allow another person to find the area.

Appendix 1. Summary of Procedures for Establishing WHAs and GWMs


Step 1
WHA(s) proposed by:
tenure holder (forest/range) recovery team,
government agency, public, private institution.
Step 2
MWLAP Technical Review (Regional Designate)
1. Consistency with Accounts and Measures for Managing Identified Wildlife.
2. Verify land status.
3. Boundary changes as necessary.
Suggested time frame: 14 days (or as applicable).
Reject proposal.
Notify proponent.
Step 3
Review and comment
MWLAP Regional designate coordinates review and comment of proposed WHA(s) with affected parties (tenure holders, government agencies, First Nations). Request for voluntary establishment of interim protection for candidate WHAs.
Suggested time frame: 60 days.
Timber supply impact analysis as required – completed by MOF regional timber supply analyst or forest tenure holder analyst for TFLs. Completed analysis reviewed by MWLAP region, forest tenure holder(s) and MOF district.
Step 4
Preparation of final WHA package (IWMS data co-ordinator). Suggested time frame: 20 days.
Return to MWLAP Region for further review and comment if required.
Step 5
Review by Provincial WHA Committee (coordinated by IWMS data coordinator). Recommendation to MWLAP delegated decision maker. Suggested time frame: 30 days.
Step 6
Decision by MWLAP DDM.
Approve
Reject
Step 7
Notice of decision, impact tracking and warehousing of approved boundaries (IWMS data coordinator and GIS data coordinator.
Notify proponent

Appendix 2. WHA Data Forms

WHA Data Form - Single Proposal

WHA proposal #:
WHA proposal name:

Location of this Site is Sensitive ☐ Yes ☐ No
If yes, please do not disclose or distribute this package without prior consultation with MWLAP or the CDC

WILDLIFE HABITAT AREA DATA FORM

SINGLE PROPOSAL

STEP 1. WHA PROPOSAL

(ALL fields in Step 1 to be completed by proponent unless otherwise indicated)

PROPONENT INFORMATION

Contact Name:
Title:
Organization:
Mailing Address:

Province: Postal Code:
Phone: Fax:

GENERAL SITE INFORMATION

Identified Wildlife Common Name:	Scientific Name:
Forest District Name:	Date Submitted (YY/MM/DD):

Describe how the site meets the requirements for WHA designation (see species WHA description). Describe whether species was observed at the site or other evidence to support WHA (e.g., nest or den site, shell fragments, breeding behaviour). Include time and date of observation(s).

UTM co-ordinates (use NAD 83 and indicate Zone/Easting/Northing). If the WHA includes a wildlife habitat feature (WHF) include the coordinates of the WHF and a brief description:

Nearest Gazetted Location:

Reference map name and number (optional, please attach):

Reference Air Photo (optional):

Directions to the site (describe access to the site):

Was species site data obtained from the BC Conservation Data Centre (CDC)? ☐ Yes ☐ No
If yes, existing CDC Feature ID (Aero_tag):

WHA proposal #:
WHA proposal name:

Describe area and surrounding land use.

STEP 2. BIOLOGICAL REVIEW (TO BE COMPLETED BY MWLAP REGIONAL DESIGNATE)

Is Proposal 100% on Crown Land (or private land that is part of a TFL or woodlot): ☐ Yes ☐ No

Does the proposal meet the minimum requirements of the WHA description? ☐ Yes ☐ No

Is the site previously unknown? ☐ Yes ☐ No

Has the site been field checked? ☐ Yes ☐ No

If yes, provide the date:

Proposal accepted? ☐ Yes ☐ No

Rationale for decision. Include reasons for accepting/rejecting the proposal:

Name: Date:

Signature: (Qualified Registered Professional)

STEP 3. AFFECTED PARTY REVIEW OF PROPOSAL (TO BE COMPLETED BY MWLAP REGIONAL DESIGNATE)

Consultation Initiation Date (i.e. date Regional Committee sent WHA package for distribution):

Date comments due back from affected parties:

Existing or tenured activities *(please check)*

☐ Access ☐ Forestry ☐ Range ☐ Mining ☐ Oil & Gas ☐ Recreation ☐ Other

Describe other:

AFFECTED PARTY CONSULTATION SUMMARY

Forestry Tenure Holder(s):	**Support WHA** (NR=No Response)	**Comments Attached**
Contact Name: Company Name: Address: e-mail:	☐Yes ☐No ☐NR Dates Contacted: (e.g. dates of letters, phone calls, meetings, etc.)	☐ Yes ☐ No
Contact Name: Company Name: Address: e-mail:	☐Yes ☐No ☐NR Dates Contacted: (e.g. dates of letters, phone calls, meetings, etc.)	☐ Yes ☐ No
Contact Name: Company Name: Address: e-mail:	☐Yes ☐No ☐NR Dates Contacted: (e.g. dates of letters, phone calls, meetings, etc.)	☐ Yes ☐ No

Range Tenure Holder(s):	**Support WHA** (NR=No Response)	**Comments Attached**
Contact Name:	☐Yes ☐No ☐NR	☐ Yes ☐ No

WHA proposal #:
WHA proposal name:

Company Name: Address: e-mail:	Dates Contacted: (e.g. dates of letters, phone calls, meetings, etc.)	
Contact Name: Company Name: Address: e-mail:	☐Yes ☐No ☐NR Dates Contacted: (e.g. dates of letters, phone calls, meetings, etc.)	☐ Yes ☐ No
Contact Name: Company Name: Address: e-mail:	☐Yes ☐No ☐NR Dates Contacted: (e.g. dates of letters, phone calls, meetings, etc.)	☐ Yes ☐ No
Surface and Subsurface Tenure Holder(s):	**Support WHA** **(NR=No Response)**	**Comments Attached**
Contact Name: Company Name: Address: e-mail:	☐Yes ☐No ☐NR Dates Contacted: (e.g. dates of letters, phone calls, meetings, etc.)	☐ Yes ☐ No
Contact Name: Company Name: Address: e-mail:	☐Yes ☐No ☐NR Dates Contacted: (e.g. dates of letters, phone calls, meetings, etc.)	☐ Yes ☐ No
Contact Name: Company Name: Address: e-mail:	☐Yes ☐No ☐NR Dates Contacted: (e.g. dates of letters, phone calls, meetings, etc.)	☐ Yes ☐ No
First Nations Groups:	**Support WHA** **(NR=No Response)**	**Comments Attached**
Contact Name: Band or Group: Address: e-mail:	☐Yes ☐No ☐NR Dates Contacted: (e.g. dates of letters, phone calls, meetings, etc.)	☐ Yes ☐ No
Contact Name: Band or Group: Address: e-mail:	☐Yes ☐No ☐NR Dates Contacted: (e.g. dates of letters, phone calls, meetings, etc.)	☐ Yes ☐ No
Contact Name: Band or Group: Address: e-mail:	☐Yes ☐No ☐NR Dates Contacted: (e.g. dates of letters, phone calls, meetings, etc.)	☐ Yes ☐ No
MOF District	**Support WHA** **(NR=No Response)**	**Comments Attached**
Contact Name: Department: Address: e-mail:	☐Yes ☐No ☐NR Dates Contacted: (e.g. dates of letters, phone calls, meetings, etc.)	☐ Yes ☐ No
Other (LWBC, etc.):	**Support WHA** **(NR=No Response)**	**Comments Attached**
Name: Agency: Address: e-mail:	☐Yes ☐No ☐NR Dates Contacted: (e.g. dates of letters, phone calls, meetings, etc.)	☐ Yes ☐ No

WHA proposal #:
WHA proposal name:

Name: Agency: Address: e-mail:	☐Yes ☐No ☐NR Dates Contacted: (e.g. dates of letters, phone calls, meetings, etc.)	☐ Yes ☐ No
Name: Agency: Address: e-mail:	☐Yes ☐No ☐NR Dates Contacted: (e.g. dates of letters, phone calls, meetings, etc.)	☐ Yes ☐ No
Operational Impacts: Forestry: Range: Mineral: Other:		
Unresolved issue(s):		
Management considerations used to reduce impact and/or resolve issues (e.g., boundary adjustments):		
Wildlife habitat area: Core area (ha): Buffer area (ha): Total area (ha): Provide justification for choice of WHA boundaries. Include reasons for any variation from that recommended in *Accounts and Measures for Managing Identified Wildlife:*		
General wildlife measures: ☐ Adopted as outlined in IWMS ☐ Modified measure(s) recommended		

WHA proposal #:
WHA proposal name:

Specify the modified measures (use exact wording to be used for signed Order):
Is there a potential for future exemptions? ☐ Yes ☐ No If yes, describe:
Additional management considerations related to but not directly a part of this candidate WHA:
QUALIFIED REGISTERED PROFESSIONAL CERTIFICATION
Submitted by (please print): Agency: Signature: _____ Date:

WHA Data Form - Multiple Proposals

WHA proposal #(list):

Location Sensitive ☐ Yes ☐ No

If yes, please do not disclose or distribute this package without prior consultation with MWLAP or the CDC

WILDLIFE HABITAT AREA DATA FORM

MULTIPLE PROPOSALS

STEP 1. WHA PROPOSAL

(**ALL** fields in Step 1 to be completed by proponent unless otherwise indicated)

PROPONENT INFORMATION

Contact Name:
Title:
Organization:
Mailing Address:

Province: Postal Code:
Phone: Fax:

GENERAL SITE INFORMATION

Identified Wildlife Common Name:	Scientific Name:
Forest District Name:	Date Submitted (YY/MM/DD):
Landscape Unit Name:	

Describe how the sites meet the requirements for WHA designation. Describe whether species were observed at the sites or other evidence to support WHAs (e.g., nest or den site, shell fragments, breeding behaviour). Include time and date of observation(s). Where different sites meet the requirements differently please list these separately, grouped by WHA#.

UTM co-ordinates of features (use NAD 83 and indicate Zone/Easting/Northing). If the WHA includes a wildlife habitat feature (WHF) include the coordinates of the WHF and a brief description. Please list.

Nearest Gazetted Location (List by WHA Tag):

Reference maps (optional, please attach):

Reference Air Photos (optional):

Directions to the sites (describe access to the sites, list by WHA Tag):

Was species site data obtained from the BC Conservation Data Centre (CDC)? ☐ Yes ☐ No
If yes, existing CDC Feature ID (Aero_tag). Please list:

WHA proposal #(list):

Describe area and surrounding land use.

STEP 2. BIOLOGICAL REVIEW (TO BE COMPLETED BY MWLAP REGIONAL DESIGNATE)

Are the proposals 100% on Crown Land: ☐ Yes ☐ No

Does the proposal meet the minimum requirements of the WHA description? ☐ Yes ☐ No

Are the sites previously unknown? ☐ Yes ☐ No

Have sites been field checked? ☐ Yes ☐ No

If yes, provide the date:

Proposal accepted? ☐ Yes ☐ No

Rationale for decision. Include reasons for accepting/rejecting the proposal:

Name: Date:

Signature: (Qualified Registered Professional)

STEP 3. AFFECTED PARTY REVIEW OF PROPOSAL (TO BE COMPLETED BY MWLAP REGIONAL DESIGNATE)

Consultation Initiation Date (i.e. date Regional Committee sent WHA package for distribution):

Date comments due back from affected parties:

Existing or tenured activities *(please check)*

☐ Access ☐ Forestry ☐ Range ☐ Mining ☐ Oil & Gas ☐ Recreation ☐ Other

Describe other:

AFFECTED PARTY CONSULTATION SUMMARY

Forestry Tenure Holder(s):	**Support WHA** (NR=No Response)	**Comments Attached**
WHA Proposal # Contact Name: Company Name: Address: e-mail:	☐Yes ☐No ☐NR Dates Contacted: (e.g. dates of letters, phone calls, meetings, etc.)	☐ Yes ☐ No
WHA Proposal # Contact Name: Company Name: Address: e-mail:	☐Yes ☐No ☐NR Dates Contacted: (e.g. dates of letters, phone calls, meetings, etc.)	☐ Yes ☐ No
WHA Proposal #s Contact Name: Company Name: Address: e-mail:	☐Yes ☐No ☐NR Dates Contacted: (e.g. dates of letters, phone calls, meetings, etc.)	☐ Yes ☐ No
Range Tenure Holder(s):	**Support WHA** (NR=No Response)	**Comments Attached**
WHA Proposal #	☐Yes ☐No ☐NR	☐ Yes ☐

WHA proposal #(list):

Contact Name: Company Name: Address: e-mail:	Dates Contacted: (e.g. dates of letters, phone calls, meetings, etc.)	
WHA Proposal # Contact Name: Company Name: Address: e-mail:	☐Yes ☐No ☐NR Dates Contacted: (e.g. dates of letters, phone calls, meetings, etc.)	☐ Yes ☐ No
WHA Proposal # Contact Name: Company Name: Address: e-mail:	☐Yes ☐No ☐NR Dates Contacted: (e.g. dates of letters, phone calls, meetings, etc.)	☐ Yes ☐ No
Surface and Subsurface Tenure Holder(s):	**Support WHA** **(NR=No Response)**	**Comments Attached**
WHA Proposal # Contact Name: Company Name: Address: e-mail:	☐Yes ☐No ☐NR Dates Contacted: (e.g. dates of letters, phone calls, meetings, etc.)	☐ Yes ☐ No
WHA Proposal # Contact Name: Company Name: Address: e-mail:	☐Yes ☐No ☐NR Dates Contacted: (e.g. dates of letters, phone calls, meetings, etc.)	☐ Yes ☐ No
WHA Proposal # Contact Name: Company Name: Address: e-mail:	☐Yes ☐No ☐NR Dates Contacted: (e.g. dates of letters, phone calls, meetings, etc.)	☐ Yes ☐ No
First Nations Groups:	**Support WHA** **(NR=No Response)**	**Comments Attached**
WHA Proposal # Contact Name: Band or Group: Address: e-mail:	☐Yes ☐No ☐NR Dates Contacted: (e.g. dates of letters, phone calls, meetings, etc.)	☐ Yes ☐ No
WHA Proposal # Contact Name: Band or Group: Address: e-mail:	☐Yes ☐No ☐NR Dates Contacted: (e.g. dates of letters, phone calls, meetings, etc.)	☐ Yes ☐ No
WHA Proposal # Contact Name: Band or Group: Address: e-mail:	☐Yes ☐No ☐NR Dates Contacted: (e.g. dates of letters, phone calls, meetings, etc.)	☐ Yes ☐ No
MOF District:	**Support WHA** **(NR=No Response)**	**Comments Attached**
Contact Name: Department: Address: e-mail:	☐Yes ☐No ☐NR Dates Contacted: (e.g. dates of letters, phone calls, meetings, etc.)	☐ Yes ☐ No

WHA proposal #(list):

Other (LWBC, etc):	**Support WHA** (NR=No Response)	**Comments Attached**
WHA Proposal # Contact Name: Agency: Address: e-mail:	☐Yes ☐No ☐NR Dates Contacted: (e.g. dates of letters, phone calls, meetings, etc.)	☐ Yes ☐ No
WHA Proposal # Contact Name: Agency: Address: e-mail:	☐Yes ☐No ☐NR Dates Contacted: (e.g. dates of letters, phone calls, meetings, etc.)	☐ Yes ☐ No
WHA Proposal # Contact Name: Agency: Address: e-mail:	☐Yes ☐No ☐NR Dates Contacted: (e.g. dates of letters, phone calls, meetings, etc.)	☐ Yes ☐ No
Operational Impacts: Forestry: Range: Mineral: Other:		
Unresolved issue(s):		
Management considerations used to reduce impact and/or resolve issues (e.g., boundary adjustments):		

WHA proposal #(list):

Wildlife habitat area:

WHA #	Core area (ha):	Buffer area (ha):	Total area (ha):
WHA #	Core area (ha):	Buffer area (ha):	Total area (ha):
WHA #	Core area (ha):	Buffer area (ha):	Total area (ha):
WHA #	Core area (ha):	Buffer area (ha):	Total area (ha):
WHA #	Core area (ha):	Buffer area (ha):	Total area (ha):
WHA #	Core area (ha):	Buffer area (ha):	Total area (ha):
WHA #	Core area (ha):	Buffer area (ha):	Total area (ha):
WHA #	Core area (ha):	Buffer area (ha):	Total area (ha):
WHA #	Core area (ha):	Buffer area (ha):	Total area (ha):
WHA #	Core area (ha):	Buffer area (ha):	Total area (ha):

Provide justification for choice of WHA boundaries. Include reasons for any variation from that recommended in *Accounts and Measures for Managing Identified Wildlife:*

General wildlife measures:

☐ Adopted as outlined in IWMS ☐ Modified measure(s) recommended

Specify the modified measures (use exact wording to be used for signed Order):

Is there a potential for future exemptions? ☐ Yes ☐ No

If yes, describe:

Additional management considerations related to but not directly a part of this candidate WHA:

QUALIFIED REGISTERED PROFESSIONAL CERTIFICATION

Submitted by (please print):

Agency:

Signature: _____

Date:

Appendix 3. Obtaining Surface and Subsurface Tenure Holder Information

It is the responsibility of the MWLAP regional designate to contact the local Gold Commissioner and Coal Administrator to determine surface and subsurface tenure holder overlap with candidate WHAs. The MWLAP regional designate must also identify overlap with oil and gas tenures. Review and comment packages will be sent to affected tenure holders by the MWLAP regional designate during the IWMS Step 3 review and comment.

The following steps are recommended for identifying coal tenures, mineral and placer tenures, and oil and gas tenures that overlap candidate WHAs.

Coal Tenures

1. Using Figure 1, identify the potential for overlap between areas underlain by coal and candidate WHAs. If no potential for overlap exists, there is no need to proceed further. If there is potential for overlap, proceed to Step 2.
2. Create a jpg or pdf of the 1:20,000 TRIM base map of the WHA polygon(s) (see *WHA Mapping Protocol*, Appendix 8).
3. Identify the index map number (BCGS or NTS) under which the candidate WHA(s) is located using the Mineral Titles Map Index website: <http://srmwww.gov.bc.ca/mida/mapindexgif.shtml>.
4. By e-mail, send the Coal Administrator a copy of the WHA jpg map and index map number. Request a tenure search for the candidate WHA(s). Coal Administrator contact information:

   Kim Stone, Coal Administrator
   P.O. Box Stn. Prov. Govt
   Victoria, BC V8W 9N3
   Phone: (250) 952-0567
   Fax: (250) 952-0541
   e-mail: Kim.Stone@gems9.gov.bc.ca
5. Within 2 weeks, the Coal Administrator will provide the MWLAP regional designate with a copy of the map(s) showing the existing tenures within the identified area, including tenure numbers. If there are no overlapping tenures, Coal Administrator will inform the MWLAP regional designate by e-mail. Maps of overlapping tenure will be mailed to the MWLAP regional designate.
6. If there are overlapping tenures, the MWLAP regional designate will perform a coal tenure search to obtain contact information for tenure holders. Use the tenure number(s) provided by the Coal Administrator to search the Mineral Titles website: <http://srmapps.gov.bc.ca/apps/mida/tenuresearchrequest.do>.
7. The MWLAP regional designate will send review and comment packages to affected tenure holders.

Mineral and Placer Tenures

1. Create a jpg or pdf of the 1:20,000 TRIM base map of the WHA polygon(s) (see *WHA Mapping Protocol*, Appendix 8).
2. Identify the index map number (BCGS or NTS) under which the candidate WHA(s) is located using the Mineral Titles Map Index website: <http://srmwww.gov.bc.ca/mida/mapindexgif.shtml>.

3. Identify the appropriate Gold Commissioner using Figure 2. Contact information for Gold Commissioners is available at the following website: <http://www.em.gov.bc.ca/Mining/Titles/TitlesSearch/gold.htm>.
4. By e-mail, send the Gold Commissioner a copy of the WHA jpg map and index map number. Request a mineral and placer tenure search for the candidate WHA(s).
5. Within 2 weeks, the Gold Commissioner will provide the MWLAP regional designate with a copy of the map(s) showing the existing tenures within the identified area, including tenure numbers. If there are no overlapping tenures, the Gold Commissioner will inform the MWLAP regional designate by e-mail. Maps of overlapping tenure will be mailed to the MWLAP regional designate.
6. If there are overlapping tenures, perform a mineral and placer tenure search to obtain contact information for tenure holders. Use the tenure number(s) provided by the Gold Commissioner to search the Mineral Titles website: <http://srmapps.gov.bc.ca/apps/mid... tenuresearchrequest.do>.
7. The MWLAP regional designate will send review and comment packages to affected tenure holders.

Oil and Gas Tenures

1. Figure 1 indicates the active NE oil and gas basin where there is high potential for oil and gas tenures. In addition, the following list of BCGS mapsheets outlines currently active and pending tenures.

   Currently active tenures (BCGS mapsheet number): 92J004, 92J005, 92J014, 92J015, 92J052, 92J053, 92J062, 92J063, 92J072 and 92J073.

   Pending tenures (BCGS mapsheet number): 83D056, 83D065, 83D066, 83D075 and 92G079.

   Using these two tools, identify the potential for overlap between candidate WHAs and oil and gas tenures. If no potential for overlap exists, there is no need to proceed further. If there is the potential for overlap, proceed to Step 2.
2. Identify overlap with oil and gas tenures. Oil and gas tenures are available in GOAT under the theme "Tenures / Petroleum Natural Gas Active Tenure." This coverage is also available through the arc warehouse (\\giswhse.env.gov.bc.ca\corp\arcwhse\tenure\og) in a coverage titled tpngt_bc.

   Attribute data associated with this coverage will provide the company name of the tenure holder in a field "Owner1." Also of note is the tenure number "Title_no."
3. There is no straightforward means of obtaining the contact information for oil and gas tenure holders. The best method is to perform a web search of the tenure holder's company name to obtain contact information. If there are problems locating contact information for a tenure holder, e-mail Greg Wagner, A/Manager, Land Access, Titles Division, at Greg.Wagner@gems3.gov.bc.ca (250) 952-0326.
4. The MWLAP regional designate will send review and comment packages to affected tenure holders.

Figure 1. Map Showing the Location of Coal and Oil and Gas Deposits in BC

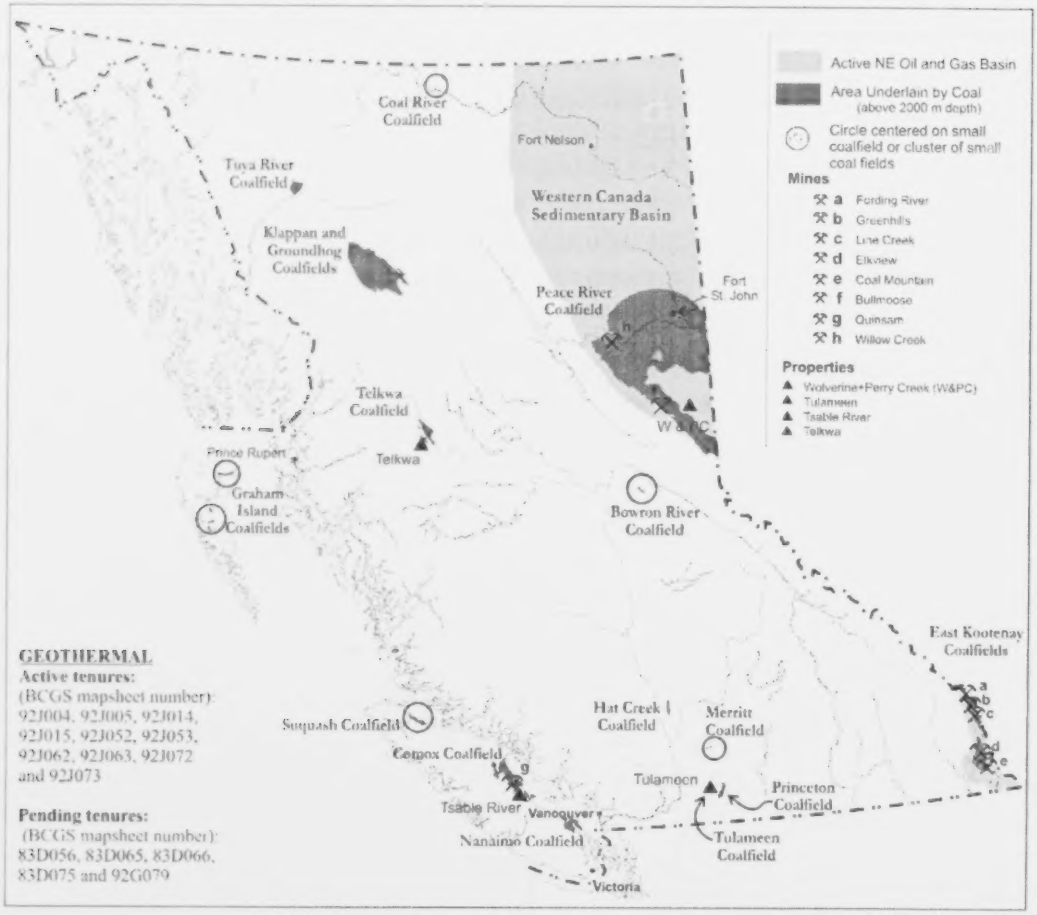


Figure 1. Map Showing the Location of Coal and Oil and Gas Deposits in BC

Figure 2. Areas of Responsibility of Individual Gold Commissioner Offices

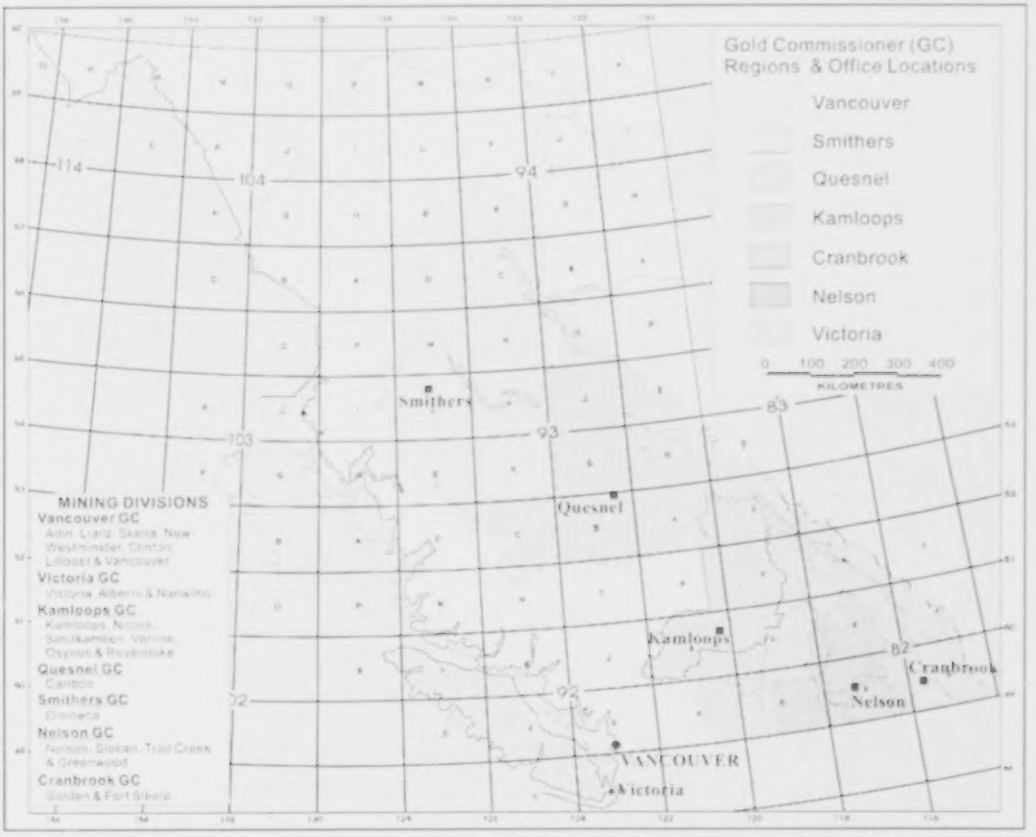
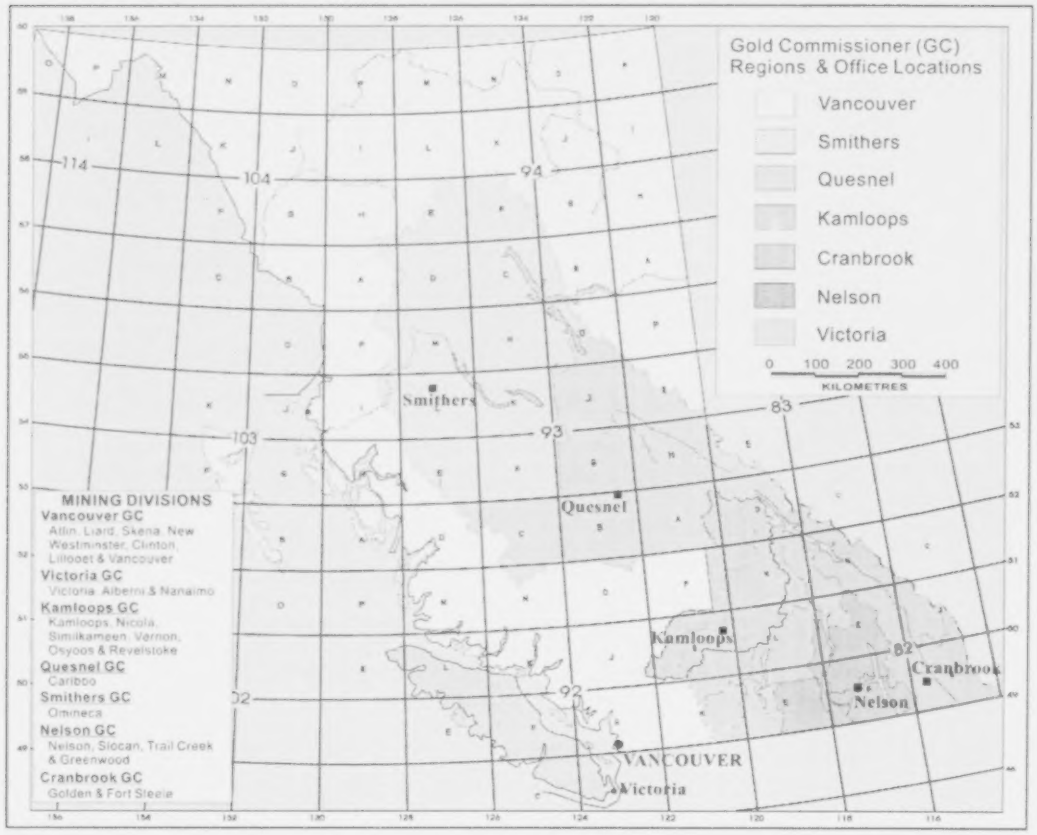


Figure 2. Areas of Responsibility of Individual Gold Commissioner Offices



Appendix 4. First Nations Review And Comment Procedures

In Step 3 review and comment, the MWLAP regional designate is responsible for identifying and sending review and comments packages to First Nations.

For all candidate WHAs, the review and comment process with First Nations should occur at the same time as the review and comment process for other affected parties. The following steps are suggested:

- Send a review and comment letter to the First Nation(s) requesting their comments regarding any aboriginal interests or other interests within the candidate WHA (see example letter below).
- Follow up with a phone call to the First Nations Chief to discuss any aboriginal interests or other interests within the candidate WHA(s).
- Arrange a meeting if required. If appropriate, invite a representative of the forest district and forest tenure holder.
- If there is no response to the first call, then phone once more.
- If there is no response to the second call, send a second letter stating that government will be proceeding with the process as previously indicated and would appreciate their comments.
- Carefully document on the WHA file all review and comment efforts, such as copies of letters, times and dates of phone calls, and notes of phone conversations and meetings.
- If regional resources are not available to conduct a detailed follow-up as outlined above, the decision whether to invest more time in attempting to get comments from a First Nation should be based on an assessment of the risk to government. Risks are highest where:

- A First Nation has a well established aboriginal title or a strong claim to title;
- Where there is a First Nation community near the site of the candidate WHA;
- Where members of a First Nation are known to hunt in the area of the WHA, or where a First Nation has a forest tenure in the area of the WHA, has members who work in the forest industry locally, or has plans for economic development based on forestry.

Example Review and Comment Letter to First Nations

To:

Dear Chief and Council:

I am writing to advise you that **[number]** Wildlife Habitat Areas (WHA) have been proposed for **[species]**. These WHAs are located in the **[landscape unit, tree farm licence, etc.]**. The candidate Wildlife Habitat Areas will serve to protect critical habitat for this species at risk. I have enclosed a map showing the location of the Wildlife Habitat Area(s) for your information.

In doing so, it is not the province's intention to limit the ability of any of the parties at the treaty negotiation table to discuss issues of interest in this area, nor to take any administrative or operational action that has the potential to infringe the existing aboriginal or treaty rights of the First Nations in the area.

The Ministry of Water, Land and Air Protection, is now taking the steps that are necessary to designate the site as a Wildlife Habitat Area. As part of this process, we look forward to receiving comments regarding any aboriginal interests or other interests that you may have regarding this site. We will be contacting you shortly to discuss this matter. I would be pleased to meet with you to answer any questions you may have. Please contact me at **[xxx-xxxx]**, if you would like to arrange a meeting.

I look forward to hearing from you.

Yours truly,

Appendix 5. Affected Party Review and Comment Procedures

Example Review and Comment e-mail to Affected Parties (not including subsurface or surface tenure holders)

Dear [Affected party]:

Re: Wildlife Habitat Area Proposals for [species] in the [forest district] [list WHA tag numbers and names]

Please find attached [number] proposals for [species] in the [forest district]. These candidate Wildlife Habitat Areas are located in the [landscape unit, tree farm licence, etc.]. The candidate Wildlife Habitat Areas will serve to protect important habitat for this Species at Risk. Attached is a map showing the location of the candidate Wildlife Habitat Area(s) for your information.

- [Include relevant biology about the Identified Wildlife element (status, how the WHA will serve to protect the species). The relevant species account can be attached as additional information.]
- [For multiple WHAs, include a table showing the size of each.]
- [Outline the general wildlife measures that will be associated with the candidate WHA(s).]

These/this candidate WHA(s) include(s) [insert number, e.g., 4] Wildlife Habitat Feature(s). Wildlife Habitat Features are specific features that require special management under the *Forest and Range Practices Act*. These Wildlife Habitat Features must not be damaged or rendered ineffective by activities such as timber harvesting, silviculture treatments, road construction, road maintenance or road deactivation. The locations of these features are included on the attached map of the candidate WHA(s). These locations are considered sensitive. We ask that you treat this information with discretion.

We are asking for your voluntary cooperation to establish interim protection for the candidate WHA(s), consistent with the General Wildlife Measures outlined above, until a final decision has been made regarding their establishment. It is estimated that a decision will be made within the next 5 months. In the event that a decision is not made by this date, I will contact you.

Thank you in advance for consideration of this proposal. Please send me any comments or concerns by [date: today plus 40 days]. I can be reached at [phone number] or [e-mail]. I would be happy to arrange a meeting or provide additional information at your request. If we have not heard from you by [date: today plus 40 days], we will assume that you have no comments about or objections to this proposal.

Yours truly,

Example Review and Comment Letter to Affected Subsurface and Surface Tenure Holders

Address

Dear [Affected tenure holder]

Re: Wildlife Habitat Area Proposals for [species] [list WHA tag numbers) on mapsheets [list mapsheets]

The government of BC is proposing to designate [number] Wildlife Habitat Area(s) for [species], under the Identified Wildlife Management Strategy (IWMS).

The candidate Wildlife Habitat Areas will serve to protect important habitat for this species at risk.

These proposals overlap with your [mineral/placer/oil and gas/coal] tenure. These tenures are as follows [list tenure numbers].

Please find enclosed a map showing the overlap between the candidate Wildlife Habitat Areas and your tenure [map provided by Gold Commissioner], as well as more detailed map of the candidate WHA(s) (1:20,000 map).

- [Include relevant biology about the Identified Wildlife element (status, how the Wildlife Habitat Area will serve to protect the species); and]
- [Outline the General Wildlife Measures that will be associated with the candidate Wildlife Habitat Areas(s).]

Acquisition of subsurface tenures, exploration and development activities may occur in Wildlife Habitat Areas in accordance with existing legislation and required environmental regulations and approvals. The general wildlife measures for a Wildlife Habitat Areas can accommodate tenure acquisition, access, exploration and development of subsurface resources. Activities that mechanically disturb the surface of the ground, including road and trail construction, are allowed subject to specific permit conditions designed to minimize potential impacts on identified wildlife, the environment and other special values.

Exemptions to the General Wildlife Measures may be approved in cases where they are necessary to accommodate site-specific conditions and activities. The mineral or energy sector can recommend that a Wildlife Habitat Area boundary be modified or rescinded where new subsurface information or activities may lead to impacts on a Wildlife Habitat Area. An alternative Wildlife Habitat Area that reduces conflicts may be proposed, if appropriate.

These/this candidate WHA(s) include(s) [insert number] Wildlife Habitat Feature(s). Wildlife Habitat Features are specific features that require special management under the *Forest and Range Practices Act*. These features must not be damaged or rendered ineffective by activities such as timber harvesting, silviculture treatments, road construction, road maintenance or road deactivation. The locations of these features are included on the attached map of the candidate Wildlife Habitat Area(s). These locations are considered sensitive. We ask that you treat this information with discretion.

We are asking for your voluntary cooperation to establish interim protection for the candidate Wildlife Habitat Area(s), consistent with the General Wildlife Measures outlined above, until a final decision has been made regarding their establishment. It is estimated that a decision will be made within the next 5 months. In the event that a decision is not made by this date, I will contact you.

Thank you in advance for consideration of this proposal. Please send me any comments or concerns by [date: today plus 40 days]. I can be reached at [phone number] or [e-mail]. I would be happy to arrange a meeting or provide additional information at your request. If we have not heard from you by [date: today plus 40 days] we will assume that you have no comments or objections to this proposal.

Yours truly,

Appendix 6. WHA Summary Form

The following template should be used by the WHA data coordinator when creating the WHA summary file for the Provincial WHA Committee and MWLAP delegated decision maker.

Summary Form

Candidate WHA [insert WHA Number] for [insert species name] in the [insert forest district]. Prepared for MWLAP delegated decision maker, [insert Date].

This WHA proposal is consistent with all policies and directives for the establishment of WHAs, including the general wildlife measures for [insert Species Name] and includes no modified measures OR includes modified measures in bold.

List of Candidate WHA

WHA Tag – WHA Name.

Step 1. WHA is Proposed

Name of proponent and affiliation, and date WHA was proposed.

Step 2. MWLAP Regional Designate Confirms Suitability of Site

Date of confirmation. Brief description outlining the rationale for the proposed WHA.

Step 3. Affected Parties Review and Comment

List affected parties consulted. For each, list the name of the person contacted, their affiliation, and whether they: support the candidate WHA, have no concerns with the candidate WHA, do not support the candidate WHA, or did not respond to review and comment. For affected parties who did not respond to review and comment, include a brief description of efforts made to contact the party.

For affected parties that do not support the WHA, briefly describe how the candidate WHA would impact their interest(s). For example, if a Range Agreement holder does not support the candidate WHA, indicate how the establishment of the WHA and the associated GWMs would impact their interest.

Does the candidate WHA conflict with First Nation's Area of Treaty Interest or Area of Interim Agreement? If yes, include a brief description of how the First Nation feels the candidate WHA would impact their Area of Treaty Interest or Area of Interim Agreement.

Where applicable, is the candidate WHA consistent with the appropriate higher-level plan? For candidate WHAs that occur in an area where there is a higher-level plan, indicate whether the candidate WHA is consistent with the plan and who was consulted and what steps were taken to verify its consistency with the higher-level plan.

Step 4. Map and Documentation

Map attached.

WHA data form and supporting documentation.

Unresolved Issues

List any unresolved issues with the proposal, that is, affected parties that do not support the proposal.

Impact Calculations

Forestry Impact calculations—total impact plus current and long term impacts.

Mineral Impacts—impacts to mineral tenure holders.

Range Impacts—impacts to range tenure holders.

Candidate Size and Description of WHA

Total hectares, core and management area, if applicable. Brief description of WHA.

Potential for Future Variances

Include any potential for future variances.

Candidate Measures

Include the General Wildlife Measures that are being put forward for approval.

Appendix 7. Provincial WHA Committee

Committee Members

Project Manager, Wildlife Conservation Planning, Chair (MWLAP)

IWMS Data Coordinator (MWLAP)

Representative from Forest Practices Branch (Ministry of Forests)

Representative from Forest Analysis Branch (Ministry of Forests)

One environmental stewardship regional manager (MWLAP)

One regional representative (Ministry of Forests)

Representative from the Mineral Policy and Program Development Branch (Ministry of Energy and Mines)

Terms of Reference

1. Evaluate candidate WHAs to ensure that they are consistent with guidelines as outlined in the *Accounts and Measures for Managing Identified Wildlife.*
2. Evaluate candidate WHAs and provide technical information to the MWLAP delegated decision maker as required. Technical information includes assessments of operational feasibility as well as risk to the species if a WHA is not approved.
3. Consult with technical experts as required.
4. Ensure that any candidate WHAs are within the impact limits (including district threshold) placed on Identified Wildlife. This will be accomplished by working with the Timber Analysis Branch who will be tracing impacts provincially and regionally.
5. Ensure that government agency positions have been adequately represented for consideration by the MWLAP delegated decision maker.
6. Document unresolved issues and forward to the MWLAP delegated decision maker for consideration.

Appendix 8. WHA Mapping Protocol

1. Mapping Procedures and Standards for Submission of WHA Proposals at Step 1

Mapping Procedures

This section describes the mapping procedures and standards for delineating WHAs for submission. It is important that WHAs are mapped in a consistent manner throughout the province for tracking and monitoring purposes.

WHA design

Criteria pertaining to the WHA design (size and shape) for each element are outlined in the *Accounts and Measures for Managing Identified Wildlife*. These element-specific criteria have been developed through a consultative multi-agency process integrating socio-economic impacts with the best available knowledge of the biology of each element.

The design of a WHA is specific to each individual element. WHAs may have a designated core around a habitat feature (e.g., nest, stream, wetland) or plant community and a management area to protect the integrity of the core. In many cases, the size and position of the WHA may be adjusted to incorporate such attributes as habitat use, land features or administrative boundaries. In all cases, WHAs should be designed and mapped to meet the element-specific requirements outlined in the account (refer to the *Accounts and Measures for Managing Identified Wildlife* document for the element in question).

WHA boundary delineation

When drafting boundaries, make every effort to incorporate suitable habitat, while minimizing reductions in timber supply and the impact on other resources (range, petroleum and mining). Initial examination for surface and subsurface tenure holders can be done through the Ministry of Energy and Mines' The MapPlace: <http://www.em.gov.bc.ca/Mining/Geolsurv/MapPlace/default.htm>. Consider opportunities to use areas or parts of areas that have already been removed from the timber supply (e.g., other WHAs, riparian reserves, wildlife tree patches, old-growth management areas, economically inaccessible areas, ungulate winter ranges, and environmentally sensitive areas that have been netted out of the productive forest land base). This will ensure that the impacts of each WHA are minimized and will allow more sites to be protected within the timber supply impact limit set by government.

WHAs can be established only on provincial Crown land. Check land title maps to ensure that boundaries do not overlap federal or private lands. WHAs cannot be drawn within provincial parks or protected areas, unless there is a range tenure (grazing licence, grazing permit, hay cutting licence or hay cutting permit issued under the *Range Act*) within the park or protected area listed on Schedule D of the *Parks and Protected Areas Act of BC*. In this case, the GWM associated with the proposed WHA could only reference range activities. Where WHA boundaries are drawn to the edge of a park or protected area, advise the Area Supervisor (MWLAP Protected Areas section) of the proposed WHA.

Where possible, WHA boundary delineation should be done digitally. Where this is not possible, all WHA boundary submissions should be delineated on 1:20,000 scale TRIM-based maps in accordance with the guidelines outlined for the identified element. See digital and hard copy mapping standards discussed below. Reconcile the WHA polygon against TRIM topographic data (such as roads, water features and contours). When appropriate, WHA boundaries may need to be adjusted to follow key habitat or physical

attributes (e.g., elevation, water feature, road, forest cover attributes) as determined from key habitat attributes, map sources and field data collected at the site. The boundaries of some WHAs will be delineated solely by the recommended buffer width. The determination of other WHAs, however, will require an analysis of habitat suitability or capability based on the known habitat requirements of a species. A combination of these approaches may also be necessary.

Field check

Preliminary WHA boundaries must be checked in the field and adjusted to accommodate site conditions, such as physical attributes and habitat use. WHAs based on map interpretation or WHAs designed to restore previously occupied habitats do not require field verification of habitat use or occupancy.

Final boundaries determined

Provide a full description of the methodology used to determine WHA boundaries and the rationale for the WHA on the WHA data form (see Appendix 2) and include it with each boundary submission. Submit WHA boundaries at Step 1 in a digital format (ArcInfo shapefile or coverage) wherever possible.

Digital Mapping Standards for Step 1 Submission of WHA Proposals

The preferred digital format for submission of WHA polygon definitions is an ArcInfo coverage with "region.wha" subclass topology (see *ArcInfo terminology explanation* below) or at minimum an ArcInfo shape file, with associated WHA attributes as specified below.

Specifications

- Projection should be in Ministry of Sustainable Resource Management standard Albers.
- Include the following three attributes in the region/polygon attribute table:

1. Item (column) name: WHA_TAG, Output Width: 14, Type: CHAR.
2. Item name: FEAT_NOTES, Output Width: 255, Type: CHAR.
3. Item name: FCODE, Output Width: 10, Type: CHAR.

- WHA FCODE for Core Area is FF33515120.
- WHA FCODE for Management Area is FF33515110.

Set the standard AREA item (software-generated) in the "region.wha" attribute table to Ministry of Sustainable Resource Management standard 16.0, meaning 16 digits with no decimals.

Hardcopy Mapping Standards for Step 1 Submission of WHA Proposals

Submit hardcopy maps of WHA polygon boundaries only when it is not possible to submit polygons digitally. Provincial standards have been developed to ensure that WHAs are submitted in an acceptable format and that the necessary data are submitted with all hardcopy maps. Forest cover, biophysical and ecosystem unit maps and other sources of information will likely be used in the delineation of WHA boundaries; however, transfer all boundary lines to a 1:20,000 TRIM map for final production.

Specifications

- Use rolled maps (not folded) TRIM NAD83, 1:20,000 base maps.
- Place all WHA features and boundaries on the base map.
- Draw all lines with a high quality, very fine drafting pen or coloured marker.
- Minimum polygon size: 5 mm x 5 mm = 1 ha at 1:20,000 scale.
- Label each WHA polygon with a letter placed outside the WHA boundary. Indicate the species or com-

munity represented by each letter in the legend at the margin of the map. A single WHA may be suitable for multiple species. If this is the case, list all species.

- In some cases, WHAs may overlap other WHAs or be nested within another WHA.

Map requirements

The following information must be included for each proposed WHA:

- Date mapped (e.g., September 24, 1997).
- Name of mapper and organization (e.g., John Smith, MWLAP).

The legend in margin of the map, or attached to map, must include:

- A description of each Identified Wildlife species or community name. If there are multiple species or communities, code the WHAs by letter and list species within each WHA (i.e., A, B, C . . .).

2. Digital Standards for Step 3 Submission of Candidate WHAs

This section describes specifications for submitting digital data to the GIS data coordinator (MWLAP, Victoria). These standards are based on the BC Government Resource Inventory Committee Digital Standard Document. Digital data will be compiled and stored at the MWLAP. The GIS data coordinator is responsible for compiling the various projects into one spatial database and ensuring consistency between projects. Digital standards will follow the MWLAP specifications. Agencies wishing to submit digital data in other formats should contact the GIS data coordinator (MWLAP, Victoria).

Introduction

Background

This section describes the digital data specifications for WHA data with a focus on spatial data collected for use in GIS in the British Columbia Ministry of Water Land and Air Protection. It is intended to ensure that B.C. government agencies are providing resource information that meets recognized standards for quality and consistency. This information will be useful to contractors or staff involved in collecting resource inventory data, managers charged with overseeing data-collection projects, custodians maintaining resource inventory datasets, and end-users seeking to apply resource inventory data to resource management and land-use issues.

Purpose of the standard

The goal is to define the digital form and structure of WHA digital data as managed by MWLAP. It defines standards for describing thematic content; standards for physical data specification; georeferencing standards; quality assurance guidelines; and recommendations for cartographic representation of the data.

This standard is introduced to achieve key provincial government objectives for digital data, by making it easier to share digital spatial data between user groups using different hardware and software; making it easier to integrate digital spatial data by adhering to Provincial standards for georeferencing resource inventory data sets; and providing quantitative and qualitative measures of data quality to ensure data-collection efforts are effective, to ensure that the Province receives good value in contracted projects.

Scope of the standards

The digital data standards will be applied to WHAs as managed by MWLAP, a Province of British Columbia agency represented at the Resources Inventory Committee.

This document describes basic georeferencing and digital data definitions for WHAs, including coordinate

systems, registration, and logical and physical descriptions for attribute and spatial aspects of the data sets. The document describes, recommends or prescribes methods for digital data capture, quality assurance and graphic data representation, as well as project metadata related to the digital capture.

The focus is on providing those standards and guidelines required by those involved in digital data capture of WHA data to ensure consistent delivery of digital data in the specified digital form or structure. The specification describes the form (or structure) of the data as it is expected to be in when delivered by contract. The document does not attempt to describe a single process for digitally capturing the data, because there might be a number of ways of getting the data into the specified form.

Intended users of the standards

This document is technical in nature, and is intended for a specialist audience of persons compiling, managing and using the WHA digital dataset. It is intended for use by two major groups:

- Government staff actively involved in the collection, storage and maintenance of WHA digital data sets; and
- End-users seeking to understand the meaning and structure of WHA datasets for use in analysis and graphic display.

Contractors and government staff involved directly with collecting WHA data will refer to this Standard for specific technical guidance on the form and structure of the datasets they prepare. Managers of such data-collection projects will use this Standard to evaluate whether resource inventory projects have been properly conducted.

Logical Data Description

WHA data consists of two main parts:

- core area: The area that is protected from habitat alteration; and
- management area: The area that will minimize disturbance of the habitat.

Physical Data Description

This section provides a precise specification of the physical format of data exchanged between GIS technicians and the GIS data coordinator.

The WHA core and management area data will be stored in the same coverage with different feature codes for the core and management area features (see Table 1). Where the boundary of a WHA core or management area coincides with a lake, river or coastline, the TRIM water features should be used for the WHA boundary rather than trying to reinterpret these lines.

ArcInfo terminology

The term "region" is a term used in ArcInfo to describe closed line features that are allowed to overlap each other. In an ArcView shape file, regions are referred to as a "polygon layer." This terminology can be confusing, because polygon features in ArcInfo do not overlap. Because you may have cores and/or management areas from different WHAs that overlap each other, the region feature should be used for storing the WHA using the subclass name WHA.

Attribute Data

Wildlife Habitat Area Coverage Table Structure

Table 1. WHA schema definition

Description	Column Name	Output Width	Type	N.dec
AREA	AREA	16	NUMBER	0
PERIMETER	PERIMETER	12	NUMBER	3
WHA_TAG	WHA_TAG	14	CHAR	
FEATURE_NOTES	FEAT_NOTES	255	CHAR	
FEATURE_CODE	FCODE	10	CHAR	

*Note: All other attributes will be stored in a WHA Attribute table.

Description of attributes

Area (m^2): Calculated by the GIS software.

Perimeter (m): Calculated by the GIS software.

WHA_TAG: Unique number to link to WHA database. See description below.

Feature Notes: A specific description of the core WHA area.

Feature Code: See Table 2 for a description of all feature codes to be used.

WHA_TAG description

The WHA_TAG is a five-character identifier to uniquely identify each WHA. It uses the format 6-001, the region number followed by a dash and a unique three-digit code.

The attributes for the WHA can be found in a tracking form with this unique code. The unique numbers in the code are determined by the next available number in the WHA tracking form. Contact the MWLAP regional designate for the location of the tracking form.

Spatial Data

Tiles

Data must be seamless, and not divided into tiles or other geographic partitions.

Format

Spatial data must be submitted in the following format:

- Unix ARC/INFO coverage in workspaces; and
- ARC/INFO export (E00), uncompressed (i.e., exported with NONE compression option).

Feature classification

Each polygon must have a feature code from the BC Government Feature Database in its feature attribute table, stored in a 10-character attribute called 'FCODE' (see Table 2 below).

Table 2. Feature classification description

Feature Code	Feature Class Description	Topology
FF33515120	Wildlife Habitat Core Area	Region
FF33515110	Wildlife Habitat Management Area	Region

Topology implementation

Polygon features

General Rules: Polygon inside points and labels must carry a Feature Code and the same Feature ID as the containing polygon.

Overlapping polygons (regions in ArcInfo)

1. Description & Rules: Polygons will be captured as complete objects, including holes (excluded areas) if applicable. (This implies duplicate line work may be present, if the edges of two polygons happen to coincide). Polygons will contain an inside point and conform to the Right Hand Rule or Downstream Rule (see *Data Capture Rules/Requirements* below).

   Polygons may contain holes, which are represented by polygons contained entirely inside the parent polygon and which do not contain an inside point. Holes will obey the Right Hand Rule. There may be more than one polygon with the same Feature ID; this corresponds to the idea of polygon sets.

2. Feature Codes & Ids: Each linestring that makes up a polygon (including polygon holes) will have a Feature Code and a Feature ID. Holes carry the same Feature Code and Feature ID as the parent polygon. The polygon inside point will have a Feature Code (not necessarily the same as the containing polygon) and the same Feature ID as the containing polygon.

Georeferencing

Horizontal datum

All data must be registered to NAD83 - North American Datum 1983, earth-centred ellipsoid derived from Geodetic Reference System 1980 (GRS80).

Projection

Albers (British Columbia): This projection pre-defines specific parameters for use with the Albers Equal Area Conic projection. For British Columbia, these parameters have been defined as:

Central meridian -126∞ 0¢ 0≤

1st standard parallel 50∞ 0¢ 0≤

2nd standard parallel 58∞ 30¢ 0≤

Latitude of origin 45∞ 0¢ 0≤

Rectangular coordinates are metric with Easting values offset by 1,000,000 metres.

Registration

- Provincial Baseline Digital Atlas 1:10 000 (TRIM2).
- Provincial Baseline Digital Atlas 1:20,000 (TRIM).

Digital Data Capture Rules/Requirements

Quality of digital data capture

Ninety percent of all points must be positioned on NAD83 within 10 metres. All points must be within 25 metres accuracy on NAD83. The NAD83 datum on the ground is defined by geodetic control monuments and Active Control Points as maintained by the Ministry of Sustainable Resource Management Geo-Spatial Reference Unit at http://srmwww.gov.bc.ca/bmgs/gsr/index.html.

Any sample of at least 3% of points must have less than a 10-metre Root Mean Square Error when compared to their surveyed locations.

Interpretation accuracy/error

Absolute (datum-related) positional accuracy/error

Point locations must be established relative to the Provincial Geo-Spatial Reference as defined by geodetic control monuments maintained by the Ministry of Sustainable Resource Management Geo-Spatial Reference Unit at http://srmwww.gov.bc.ca/bmgs/gsr/index.html.

or

Relative (internal) positional accuracy/error

The calculated area of each digital feature must be within 15% of its calculated area as determined by field survey of its perimeter using GPS. OR. Survey traverses of less than 500 metres must conform to an accuracy of 5 metres + 1:100 when the absolute positional accuracy required is 10 metres. The traverse should be balanced using a compass rule adjustment.

Digitizing accuracy/error

All polygons must be within 0.5 mm of the original map features when plotted on check plots at map scale. For data captured from existing hardcopy maps at 1:20,000 scale, all polygons must be within 10 metres of their mapped location in projection coordinates.

Precision

All data will be stored in single precision ARC/INFO, as specified above.

Resolution

For 1:20,000 or smaller scale mapping, vertices along the lines defining polygon features must be at least 20 metres apart in ground coordinates.

Data capture rules/requirements

Right-Hand Rule

An arc that bounds an area feature must be captured such that the feature lies to the right of the line. Equivalently, the boundary of the feature must be oriented in a clockwise direction.

Applicability: This rule applies to discrete area features.

Self-Intersection Rule

Arcs must not intersect (i.e., touch or cross) themselves except at their end nodes. This includes the component arcs that form polygons.

Polygon Integrity Rule

Polygonal feature classes must not contain undershoots or overshoots (i.e., 1-nodes, or nodes that touch only one arc).

Vertex Density Rule

The minimum vector length should be 5 metres.

A minimum vertex density (or equivalently a maximum vector length) may be specified. This is stated in terms of the minimum number of vertices per coordinate system unit, or equivalently as the maximum vector length in coordinate system units. One reason for specifying this is to ensure that the accuracy of lines is maintained under projection transformations.

Metadata

Metadata should be stored in a meta info table for each WHA coverage.

Table 3. Example of Fields and Attributes for WHA Metadata form

Field #	Key	Value
1	Title	Unapproved WHAs
2	Description	Boundaries showing candidate WHAs
3	Source	Digitized from data supplied by <name of MWLAP regional IWMS designate>
4	Accuracy	Data should be to 1:20,000 specifications
5	Warning	Contact MWLAP regional IWMS designate
6	Registry	<none yet>
7	Modified	Date when dataset last updated

Submission of Digital Data to GIS Data Coordinator (MWLAP, Victoria)

When submitting WHAs to the GIS data coordinator in Victoria, the following naming convention should be used for the coverage names:

WHA_ mmddyy _R2 e.g., WHA_121300_R2

The 13th character in the coverage is the region number and characters 5 thorough 10 are the month, day and year (mmddyy). This will allow the GIS data coordinator to track digital coverages submitted.

Approved WHAs will be moved to the master coverage by the GIS data coordinator and this coverage will be distributed to the MWLAP regions. Please submit checkplots with the digital data to ensure accuracy.

3. Procedures and Standards for Step 4 Mapping and Step 7 Data Warehousing

Step 4 mapping and Step 7 data warehousing procedures are the responsibility of the GIS data coordinator in Victoria. The specific requirements for these two steps are as follows:

Step 4

- adding candidate WHAs received from the region in Step 3 to the WHA master coverage; and
- creating WHA maps for signoff by the MWLAP delegated decision maker.

Step 7

- uploading approved WHAs to the WHA ftp site; and
- adding approved WHAs to the Provincial digital coverage of approved WHAs in the Ministry of Sustainable Resource Management spatial data warehouse.

Appendix 9. Requirements for Complying with a GWM and Exemption Provisions Provided under FRPA

FRPA Regulation	Compliance with GWM	Exemption Provision
Forest Planning and Practices	**70** Subject to 93(1) A person who is (a) a holder of an agreement[1] or (b) authorized in respect of a road carries out, on an area, timber harvesting, silviculture treatments, road construction, road maintenance or road deactivation, the person must comply with each GWM that pertains to the area.	**93(1)** The designated official may exempt a person referred to in section 70 if satisfied that (a) the intent of the GWM will be achieved, or (b) both of the following apply: (i) there is no other practicable option for carrying out the timber harvesting, silviculture treatments, road construction, road maintenance or road deactivation, as applicable; (ii) the exemption is in the public interest.
Range Planning and Practices	**36(1)** If a GWM is in effect for an area, a holder of an agreement under the *Range Act* who carries out a range practice on the area must ensure that the range practice conforms with the GWM **(2)** For the purposes of subsection (1), a measure takes effect on January 1 of the calendar year after the order that established the measure was made.	**36(3)** The designated official may exempt a holder of an agreement under the *Range Act* from the requirements of subsection (1) if (a) the holder proposes an alternative to the GWM, and (b) the designated official is satisfied that the proposed alternative will achieve the intent of the GWM.
Woodlot License and Practices	**54** Unless exempted under section 76 **(2)**, if a general wildlife measure is established for a woodlot licence area, the holder of a woodlot licence who carries out a primary forest activities in the area must comply with each general wildlife measure that applies to the area.	**76(2)** A designates official may exempt a holder referred to in section 54 if satisfied that (a) the intent of the general wildlife measure will be achieved, or (b) both of the following apply: (i) there is no other practicable option for carrying out the intended primary forest activity; (ii) the exemption is in the public interest.

1 "holder of an agreement" means a holder of an agreement under the *Forest Act* other than woodlot license.